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Wesleyan University

Bulletin

Old Series: May 1880

—THE—

Wesleyan University Bulletin.

MIDDLETOWN, CONN.

JANUARY, 1888.—No. 1.

It seems certain that there are many who would welcome, from time to time, some official intelligence from Wesleyan University beyond what can properly be given in the annual catalogue. This want THE BULLETIN is intended to supply. It makes no pretension to give a formal representation of the condition or work of the college in all its varied departments. It is, rather, a simple budget of college news, which may afford some notion of what is doing here at the present moment, and of how it is done. It is hoped, furthermore, that THE BULLETIN may not only give such glimpses of the daily work of faculty and students as shall indicate the pulse of intellectual life in college, but that it may also suggest some of the claims and some of the needs of Wesleyan University, and may thus help to secure from alumni and friends a more constant intelligent, and hearty coöperation in all that pertains to the interests of the college.

CHANGES.

IN COURSE OF STUDY.—In the summer of 1886 the Board of Trustees gave their approval to a recommendation of the faculty, that the course of study, which had remained since 1873 with only unimportant changes in detail, should be modified in several important respects. The principal objects to be attained by this revision are the following:

1. The introduction of Modern Languages and Natural Science at an earlier period of the course—a change rendered possible by a slight reduction in the amount of required Latin, Greek, and Mathematics.

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2. The bringing of the requirements for admission to the Latin-Scientific and Scientific Courses more nearly to an equality with those for the Classical Course, by including in the requirements for the former courses a knowledge of French or German.

3. The re-arrangement of the curriculum with a view to bring (with as few exceptions as practicable) each study common to all three of the courses into the same year.

4. A slight diminution of the amount of class-work required of the Seniors, in order to allow more leisure for special-honor work and other forms of collateral study.

The actual work of last year was necessarily transitional between the old course and the new. The same is true, in some degree, the present year, although it has been practicable this year to carry into effect most of the changes contemplated.

The following are some of the features of the new course of study which are put in practice for the first time this year:

1. The candidates for the Latin-Scientific and Scientific Courses have been examined in Modern Languages.

2. The Freshmen in the Latin-Scientific and Scientific Courses no longer take Rhetoric and Logic with the Classical Sophomores.

3. The Scientific Freshmen take both French and German.

4. Astronomy is taken this year by all the Juniors and by the Scientific Sophomores.

The next college year will see the new course of study completely established.

IN DAILY PROGRAMME.—For several years past, morning prayers have been held at 8 A. M., and recitations have continued until 5 P. M., with an intermission from 1 to 2 P. M. Very few exercises, however, have been placed on the programme for the hours of 8 A. M. and 2 P. M. Instructors have objected to the former hour, as the time remaining after the chapel service has been insufficient for a lecture or recitation of the usual length. The two o'clock hour, immediately after dinner, has always been deemed an undesirable one. At the beginning of the present year, a large number of the students petitioned the faculty to arrange the programme so that no recitations should occur after 4 P. M., in order that the two hours from four to six might be free for athletic sports and other forms of out-door recreation. It appeared that the change could be made without detriment, provided the entire eight o'clock hour were given to class-work. It was accordingly decided that the bell should ring for prayers at 7:45 A. M., so that the classes assigned to the first hour could have full time for their work. Recitations, accordingly, close at four, only the small number of students who are in the laboratories being required to continue their work after that hour. The new arrangement has given satisfaction to both students and instructors, and it is hoped that it will prove advantageous to the sanitary condition of the College.

IN PERSONNEL.—The College was so unfortunate as to lose the services of its efficient Librarian, Mr. W. K. Stetson, who resigned during the last academic year, to accept a position as Librarian of the New Haven city library, with larger salary than the College was able to offer. At the opening of the present year, Mr. L. O. Kuhns, who graduated in the class of 1885, and had since been prosecuting studies in Europe, entered upon the duties of the office. Mr. H. S. White, tutor in Mathematics and Registrar, resigned last Commencement, to go abroad for study. At the opening of the present year, Mr. W. J. James, who graduated in 1883, and has spent the four intervening years in German universities, entered upon the duties of Tutor in Mathematics and Registrar; and Mr. E. B. Van Vleck, who, since graduating in 1884, has been Assistant in Mathematics and Astronomy here, and student in Mathematics and Physics and Fellow in Physics in Johns Hopkins University, became Tutor in Mathematics.

DEPARTMENTAL NOTES.

Under this head are collected items relating to the work of a number of departments, and titles of publications which appeared or lectures which were delivered for the first time, in 1887.

LATIN.—Wesleyan furnishes a considerable number of teachers to the preparatory schools. That these teachers may be better prepared for their office, the Instructor in Latin has instituted courses of lectures in which topics immediately relating to the teacher's work are discussed. The first course was given last year, and consisted of lectures on the philosophy of education, the relative importance of different branches of study, the history of classical studies, methods of teaching the classics, the best editions of classic authors, the choice of books of reference, etc. This year the lectures are on Vergil. His life and poems are treated in such a way as to give a systematic introduction to the thorough study of this author, and to indicate the principal sources of information concerning him. The course will conclude with a discussion of methods of teaching Vergil.

Lectures have been given by the instructor as follows: Before the college in last winter's course, on What the College-bred Man Ought to do for Public Schools; before the Massachusetts Normal School at Westfield, on Roman Private Life, illustrated with stereopticon views; before the Western Massachusetts High School Teachers' Association at Northampton, on A Symmetrical Preparation for College. The last mentioned address will be published in the *New England Journal of Education*.

Ginn & Co's last catalogue contains the following announcement: "Herodotus, Book II., by Prof. J. W. White of Harvard University, and A. C. True, Ph. D., of Wesleyan University." This book will be published soon.

The principal apparatus purchased for the Latin department during the year past consists of about two hundred lantern slides, illustrating Roman architecture

and private life. Many of these slides were made on the special order of the instructor. The slides form the basis for a course of lectures to the Sophomore class.

The reduction of the number of hours given to Latin in Freshman year seems to have resulted in the choice of the Latin of Sophomore year by a larger proportion of the students in the Latin-Scientific course, for whom Latin is an elective in the Sophomore year.

In connection with the study of Roman history, each member of the Freshman class is examined on one of six courses of collateral reading presented for his choice. Among the courses offered this year is the following:

COURSE IV.—CLASSICAL ROMAN LITERATURE.

1. Crutwell's Hist. of Rom. Lit., Book II.
2. Simcox's Hist. of Lat. Lit., Part II., c. 1.; Part III., c. 4.
3. Sellar's Roman Poets of the Republic, cc. 14-15.
4. Mommsen's Hist. of Rome, Book V., c. 12.
5. Lucretius, *De Rerum Natura*, Book I., to line 448; Book V., 770-1090 (in translation).
6. Catullus, *Epithalamium* upon the marriage of Manlius and Vinia; *Coma Berenices*. Tibullus, Book I., *Elegy 1*; Book III., *Elegy 3*. Propertius, Book III., *Elegies 10, 26*; Book IV., *Elegies 7, 10*; Book V., *Elegies 4, 11* (in translation).

RHETORIC AND ENGLISH LITERATURE.—Professor Winchester meets the Freshman Class this year three times a fortnight, instead of twice a fortnight as formerly. The outline study of the history of the language, which has heretofore extended through the year, will be concluded about the middle of the winter term; the rest of the year will be given to elementary rhetorical study, with copious practical exercises. The work of the class-room will remain under the charge of Professor Winchester throughout the year, but the written exercises will be examined and corrected by Messrs. Taylor and Williams. By this change it is hoped that the class may find time in the Sophomore year for some study of advanced rhetoric and criticism that may serve as a preparation for the literary study of Junior year.

A part of the Sophomore essays will be read this year by Mr. Kuhns, the Librarian.

Members of the Senior elective class in English Literature, studying the literature of the period from 1789 to 1830, will have opportunity to meet occasionally for readings from the poetry of Tennyson, Browning, and Matthew Arnold, with conversational discussion.

Lectures by Professor Winchester.—In Unity Hall, Hartford, last spring, a course of six lectures upon the poetry of the early part of this century. The subjects are as follows: 1, Burns; 2, Wordsworth; 3, Rise of Romantic Poetry—Southey, Coleridge, Scott; 4, Byron; 5, Shelley; 6, Keats.

These lectures were repeated in November last before the students of Wells College.

ELOCUTION.—A lecture on Expression in Advanced Reading was recently delivered by Professor Hibbard before the Connecticut Teachers' Association at New Haven.

Professor Hibbard has recently been elected a member of the Connecticut State Council of Education.

CHEMISTRY.—In Qualitative Analysis the text-book in use the current year was prepared in the laboratory. It consists partly of tabular schedules which were drawn up by members of last year's class from their own observations, with the aid of the instructors, and were printed on the cyclostyle and bound together in book form. The details of the printing of the present volume were attended to by Mr. H. L. Rich of the Junior class of last year.

During 1887 reports of original investigations have been published as follows:

In the *American Chemical Journal*, three articles of a series of "Contributions from the Chemical Laboratory of Wesleyan University," viz.: No. III., On the Liberation of Nitrogen from its Compounds and the Acquisition of Atmospheric Nitrogen by Plants. By W. O. Atwater. 23 pp.; No. IV., Notes on the Soda-Lime Method for Determining Nitrogen. By W. O. Atwater and C. D. Woods. 14 pp.; No. V., On the Chemistry of Fish. By W. O. Atwater. 50 pp.

In the *Journal of Analytical Chemistry*, Notes on Burettes and Pipettes. By W. O. Atwater and C. D. Woods. 6 pp.

In the *Zeitschrift für Biologie*, Ueber die Ausnützung des Fischfleisches im Darmkanale im Vergleich mit der des Rindfleisches. By W. O. Atwater. 13 pp.

At the meeting of the American Association for the Advancement of Science, in New York, in August, accounts of experimental investigations in this laboratory were given in the Chemical Section, under the titles: The Determination of Nitrogen, and Chemical Changes due to Osmose in Oysters. In the Section of Economic Science and Statistics, at the same meeting, papers based in part upon studies in this laboratory were presented, on The Physiological and Pecuniary Economy of Food, and The Food of American and European Workingmen and its Relation to the Work Done.

A compilation of data regarding the chemical composition of the human body was made by Mr. E. A. Welch of the class of 1885, and presented as part of a thesis for a special honor in chemistry. The work was continued and the final estimates were revised, also as a part of a special honor thesis, by Mr. R. H. Pomeroy of the class of 1887. The data were gathered from chemical and physiological journals and transactions of societies, mostly German. The occasion of the work was the preparation of an article on the subject for the Bulletin of the U. S. National Museum. Though that article is not yet in print, the final calculations were given in the *Century Magazine* for May, 1887. One of the papers above mentioned as read before the Economic Section of the American Association for the Advancement of Science included data from a special honor thesis by Mr. C. S. Videon of the class of 1887.

Magazine articles by Professor Atwater, based in part upon studies in this laboratory, have appeared: In the *Century Magazine*, May, June, July, and September, 1887, the first four of a series on The Chemistry of Foods and Nutrition. In the *Popular Science Monthly*, November, 1887, an article on The Chemistry of Oyster Fattening.

Lectures have been given by Prof. Atwater: Before the college in last winter's course, on The Early History of Universities; before the American Fisheries Society in Washington, on Chemical Changes in Oysters in Floating; before the American Association of Agricultural Colleges and Experiment Stations, in Washington, on The Co-ordination of Work in Agricultural Experimenting; before teachers, in the Hall of the Industrial Education Association, New York, on The Teaching of Food Economy in the Schools; before the Annual Convention of the Connecticut Board of Agriculture, on Twelve Years of Experiment Stations in the United States.

GEOLOGY.—The only change in text-books made this year is the adoption of Leconte's Compend of Geology for the required class in that science. The text-book work will be supplemented with a large number of lectures, treating of topics which seem to require more extended discussion than is given in the book.

In Evidences of Christianity—a study temporarily assigned to Professor Rice—Fisher's Grounds of Theistic and Christian Belief will be used as the text-book.

Lectures by Professor Rice: Before the college, in last winter's course, on How to Study.

Jan. 14. Address at dedication of new laboratory, Centenary Collegiate Institute, Hackettstown, N. J. Subject—The Plan of Natural Science in Education.

Aug. 4. Lecture at Round Lake Assembly. Subject—Evolution of Living Beings.

Oct. 12. Matriculation address before the School of Theology, Boston University. Subject—The Alternative—Christianity or Agnosticism. This address is to be published soon in the *Christian Advocate*.

Dec. 28. Paper before the Society of American Naturalists, New Haven. Subject—Science-Teaching in Schools.

An article by Professor Rice on The Occurrence of *Stizostedion Vitreum* in the Basin of the Connecticut, appeared in the *American Naturalist* for October.

BIOLOGY.—The only important change in methods of class-work has been in the second year's course in Practical Biology. The first three weeks are spent in Physiological Chemistry. The rest of the fall term is occupied with a study of the modern theories of evolution. For this purpose the class meets once a week at the house of the instructor to discuss a topic previously assigned. At these meetings each student reviews the special paper given him to read in preparation for the meeting, and then follows discussion of the arguments thus presented to the class. Conn's *Evolution of To-day* is used as a basis for the course. The second term is spent in the laboratory. The work is in histology,

dissection of the cat, and bacteriology. The latter subject has been introduced this year because of its growing importance. The course in bacteriology consists of general laboratory work upon bacteria, microscopical study, chemical tests of staining, culture experiments, experiments with poisons, etc., to give a practical knowledge of the subject as a foundation for intelligent reading upon the germ theory of disease. The spring term is occupied with the study of embryology of the chick and with physiological experiments.

Bastin's Elements of Botany has been substituted for Gray's Elements of Botany and lectures.

New apparatus for Laboratory.—Six Zeiss microscopes, Thoma microtome with all appurtenances, Du Bois Raymond induction coil.

The changes in the course of study last year affected the Biological Department chiefly by bringing Botany into the Freshman year of the Scientific and Latin-Scientific courses and into the Sophomore year of the Classical course. The object of this is to introduce the student early to work which fosters the habit of observation. The study of flowers teaches the student to see accurately and define exactly, and thus serves as an excellent preparation for the other scientific work of the college course.

A course of lectures on Zoology was delivered by Professor Conn, at the Martha's Vineyard Summer Institute, during the past summer.

Professor Conn delivered before the college, in last year's course, a lecture on Original Research in College—afterwards printed in *Science*.

Professor Conn has published articles as follows: Modern Biology as a Branch of Education, *Science*, Feb. 18; Original Research in the American College, *Science*, September 2; The Origin of Life, *New Princeton Review*, September; Scientific Fact and Scientific Inference, *American Naturalist*, September; Criticism of "Romantic Love and Personal Beauty," *Science*, September 18.

GENERAL COLLEGE NOTES.

LECTURES.—During the college year 1886-7 a number of lectures were given by gentlemen from outside the College and by members of the faculty, in the lower chapel. They were intended primarily for the students, but were also listened to by citizens of the town, who were invited to attend. Those from gentlemen outside the College were: by the Rev. Dr. Long, of Roberts College, Constantinople, on The Eastern Question; by the Rev. Dr. Porter, ex-President of Yale University, on English Universities; and by R. W. Gillet, LL. D., the poet and editor of the *Century Magazine*, on The College and American Literature. Lectures were given during the fall term of the current year by Mr. W. H. Dall, the Alaskan explorer, Paleontologist of the U. S. Geological Survey and Curator of the National Museum, on Alaska; by the well-known missionary, Rev. J. M. Thoburn, D. D., on The Intellectual Awakening in India; by Mr. E. S. Nadal, on An Old Virginia Village; and by Rev. G. H. McGraw, M. A., at the invitation of the Young Men's Christian Association, on Missionary Life in India. Several gentlemen of prominence in the intellectual movements of the

time have consented to give addresses during the winter and spring terms of this year. The value of such lectures, in the estimation of both faculty and students, is very decided, and the desirability of a fund for maintaining regular courses has already begun to make itself felt.

LIBRARY.—The total number of accessions to the Library during the year 1887 is about 1,400. Nearly 900 volumes from the library of the late Rev. D. D. Whedon, D. D., were presented to the library by his son, Rev. J. S. Whedon, M. A. These naturally belong to those departments of study in which the distinguished Methodist scholar was especially interested. The larger number of the books can be brought under the general heads of Theology, Philosophy and Science, the last more especially in its relations to religion. In many of the volumes are notes, more or less copious, in Dr. Whedon's own hand—a fact which adds not a little to their value.

The accessions due to the ordinary means of increase—books purchased with the interest on the Alumni Library Fund, gifts from individuals and Government publications—have fallen somewhat below the usual number.

MUSEUM.—An important exchange of specimens with the Smithsonian Institution has been made during the past term. Mr. Wm. H. Dall, Curator of Tertiary and Recent Mollusca in the National Museum, visited our museum and selected from our duplicate shells such shells as were needed at the National Museum. Our collection numbers 94,000 specimens, representing about 9,000 species from all parts of the world. From this collection Mr. Dall selected a large number of desirable specimens without materially diminishing the number of species in our collection. A part of the invoice in exchange for these shells has already been received. It consists of 1,234 species of tertiary and quaternary fossils, mostly shells.

Important changes have recently been made in the arrangement of the collection of paleozoic fossils, the lithological collection, and that to illustrate physical geology. These changes were made necessary by the large increase in the number of specimens received during the past few years. The new arrangement makes the Museum more instructive to the general student.

THE MIDDLETOWN SCIENTIFIC ASSOCIATION was organized in March, 1871, by members of the college faculty and other citizens of Middletown. At the regular meetings of the association, held the second Tuesday evening of each month in a lecture room of the college, the larger part of the evening is given to the two or three papers especially prepared for the meeting and to the discussion of them by the Association. The papers are not limited to any one branch of science. It is intended that at least a résumé of recent progress in each department shall be presented in the course of the year.

The subjects discussed during the fall term of the present college year are as follows;

Oct. 18, 1887—

1. A Review and Criticism of the Book entitled "Romantic Love and Personal Beauty." H. W. Conn.

2. Résumé of recent progress in Geology. W. N. Rice.

Dec. 13, 1887—

1. The Journal Birds of Prey found at Portland, Conn., with remarks on their food-habits. J. H. Sage.

This very interesting paper was illustrated by specimens taken from our museum and from the cabinet of Mr. Sage.

2. Recent Spectrum Researches. E. B. Van Vleck.

YOUNG MEN'S CHRISTIAN ASSOCIATION.—The branch of this Association at Wesleyan was organized in May, 1885, for the purpose of better union of Christian work among the students and with other colleges. Somewhat over a year ago a room in Memorial Chapel was fitted up for meetings, seats being provided for about seventy-five persons. The regular religious meetings of the College, except the Thursday evening class-meetings, are under the direct supervision of the Association. These comprise the weekly prayer meetings of each class held on Monday evening, and a college prayer meeting held every Sunday morning directly after chapel. The business of the Association is transacted at a general meeting on the first Monday evening of each month. Most of the work of the Association is under the charge of four standing committees, each composed of one member from each class. The Devotional Committee has the care of the religious meetings, each member having special charge of the weekly prayer meetings of his own class. It is the duty of the Membership Committee to call upon all new students and endeavor to secure their interest in the Association work and their coöperation as members. The Missionary Committee have in charge a missionary meeting to be held at least once each term. The addresses by Rev. Dr. Thoburn and Rev. Mr. McGrew, referred to elsewhere, have done much to increase the interest in this subject. The Committee on Bible Study provides, for all who wish, a course of study in "The Bible as applied to a living Christianity." The present subject is "The Old Testament Idea of God." The study is carried on in classes of about eight, and some sixty members are enrolled. A report by the President of the Association, Mr. F. H. L. Hammond, of the Senior class, from which the above statements are taken, adds: "Our meetings have usually been well attended and of great interest, especially the Sunday morning prayer meetings. Many of our alumni hold in grateful remembrance that meeting in past years, and we believe it has never been more useful than at present. * * * It is the purpose of the Association to exert such an influence upon the students that they may be led to take a decided stand in favor of the right immediately upon their entrance into our midst and to assist them by our sympathy and prayers to remain true to their principles all through the somewhat trying years of college life."

DAY OF PRAYER FOR COLLEGES.—On the last Day of Prayer for Colleges, January 27, 1887, a most appropriate and valuable sermon was preached by Rev. H. A. Buttz, D. D., President of Drew Theological Seminary. On the coming day of prayer, January 26, 1888, a sermon is expected from the Rev. Bishop E. G. Andrews, D. D., LL. D.

ALUMNI NOTES.

THE WESLEYAN UNIVERSITY CLUB OF NEW YORK was formed in 1869. "Its object is to increase the acquaintance among Wesleyan graduates, to facilitate the entrance of younger graduates into active life, and to promote the interests of the University." Its nineteenth annual meeting was held at Clark's, No. 22 West Twenty-third street, New York City, Dec. 9th, 1887, at 5 P. M. Two hundred and twenty-five invitations were sent out. About eighty persons were present at the banquet. The toasts and speakers were as follows: President's Address, Geo. G. Reynolds, '41; Our Alma Mater, Prof. J. M. Van Vleck; Our Friendly Neighbors, F. A. Ward, Yale, '62; College Presidents, Rev. John Rhey Thompson, D. D.; The Flood, Gen. Clinton B. Fisk; The Undergraduates, H. H. Beattys, '88. Toastmaster, Stephen H. Olin, '66. The officers for 1887 were re-elected, as follows: President, Hon. Geo. G. Reynolds, '41; First Vice-President, Rev. Henry Baker, D. D., '54; Second Vice-President, Hon. A. M. Talmadge, '74; Secretary, Geo. D. Beattys, '85; Treasurer, W. F. Randall, '80.

THE BOSTON WESLEYAN UNIVERSITY CLUB met Dec. 12, 1887, at the Tremont House. Four hundred and sixty-five invitations were sent out to all parts of New England, and ninety-three persons sat down to dinner. Hon. Darius Baker, '70, presided, and E. A. Wilkie, '76, acted as toast-master. The speakers, in addition to them, were Profs. J. M. Van Vleck and M. B. Crawford, Dr. Henry O. Marcy, LL. D., Hon. John C. Rand, '63, E. H. Talbot, '74, and Mr. Marcus White, '88, representative of the undergraduates. The officers elected for next year are as follows: President, George L. Roberts, Esq., '58; Vice-Presidents, Rev. A. McKeown, D. D., '51, A. S. Roe, '70; Secretary, W. E. Rowell, '85; Treasurer, E. H. Mansfield, '77; Executive Committee, Charles H. Furber, '73, F. J. Collins, '79, Rev. C. A. Littlefield, '84.

THE PHILADELPHIA WESLEYAN CLUB was formed in 1884. Its fourth annual meeting was held Dec. 23, 1887, at Hotel Bellevue. Acting-President Van Vleck spoke of the work of the college, and John B. Scott, '81, read a poem, "replete with telling hits and local coloring." John A. Cass, '72, was toast-master. The officers for the ensuing year are as follows: President, Rev. W. M. Rice, '37; Vice-President, C. L. Hamilton, '70; Secretary, J. A. Develin, '83; Treasurer, G. F. Archer, '81; Executive Committee, Rev. N. L. Briggs, '61, J. A. Cass, '72, Chas. Scott, Jr., '86. The next meeting will be held Dec. 6, 1888. Alumni in Philadelphia and vicinity are requested to send their names to the Secretary for enrollment.

At a reception recently given to Acting-President Van Vleck at the residence of Geo. S. Bennett, Esq., of Wilkesbarre, Pa., Mr. Bennett's proposition to found a Wesleyan Club of Northeastern Pennsylvania was enthusiastically received. Messrs. H. B. Payne, Geo. S. Bennett, Geo. W. Shonk, J. C. Lange and W. E. Woodruff were appointed a committee to secure the coöperation of all the trustees and alumni of this district in the formal organization of the new club.

ACTIVE measures are being taken to form a Central Wesleyan Club with headquarters at Chicago.

ALL alumni are earnestly urged to notify the President of the college of any change in their post-office address. Catalogues and bulletins will be forwarded to all alumni whose places of residence are known to the President. All friends of the college are requested to send to the President the address of any persons to whom catalogues should be sent.

Copies of all books and other publications by our alumni should be forwarded to our library by their authors. And, in short, the college desires to have as much information as possible concerning its alumni. It is intended, as far as may be, to keep at the college an alumni record with revisions up to date.

NEEDS.

Of the material needs of the college we venture to specify two which, it will be generally agreed, are among the most urgent.

First—A New Gymnasium.—The vote of the undergraduates would undoubtedly put this at the head of our wants. The present gymnasium was built twenty-four years ago. It was somewhat inadequately furnished, even at the outset, with necessary appliances, and never contained dressing-rooms, bath rooms, or facilities for the more attractive and popular forms of exercise. At present it can hardly be called adequate to the needs of the college. There should be also some provision made for proper physical training and instruction. The prevalent enthusiasm for athletic sports—which, though doubtless open to abuse and often abused, is, on the whole, a healthy and helpful thing—increases our students' sense of their needs in this direction. A new gymnasium with provision for instruction in physical culture would certainly do much to encourage the methodical, vigorous and congenial exercise which is so essential to the health of the earnest student.

Second—An Enlargement of the Library Fund.—Perhaps no need is more pressing at the present moment than this one, and every advance in the variety and thoroughness of college work makes it felt more keenly.

The college library is, in many respects, an excellent one. It numbers over 36,000 volumes, mostly very well selected. It supplies the student, in all but the most advanced departments of his work, with at least a moderate selection of the standard authorities upon the subject he is pursuing. It contains one or two

noteworthy special collections, chief of which is a collection of one thousand pamphlets, three hundred volumes and some two hundred prints, illustrating the rise of the Wesleyan movement in England.

But while the college library is thus a very creditable one, it should be urged upon the attention of the friends of the college that the library fund is inadequate for its proper maintenance and growth. The Alumni Library Fund, according to the last report of the treasurer, is \$18,792. The income from this sum is quite insufficient for our present needs. It should be remembered that all other departments of the college have been greatly developed during the past twenty years; the library alone, which is in a sense the very heart or nucleus of a college, has relatively declined. To the general endowment fund some \$400,000 has been added; to the library fund nothing has been added. And this, too, in a period marked by special attention to libraries all over the country. It is, furthermore, to be noted that all the recent changes in the subjects and methods of college education—the specialization of studies, the increase in elective studies, the greater proportion of lecture instruction, the “seminary method” of study in advanced classes—all combine to make a large library more indispensable than it used to be. Modern methods of instruction require the student to search out many facts for himself, aiming only to guide his search, and test its results. Thus the library largely takes the place of text-books, and becomes a part of the necessary equipment of the college as it never was before. In a word, we find the library failing us just when we have come to need it most.

When our friends really understand how urgent is the need which these facts indicate, we are confident the need will not long remain unsupplied. At least \$50,000 should at once be added to our library fund.

— T H E —

Wesleyan University Bulletin.

MIDDLETOWN, CONN.

APRIL, 1888.—No. 2.

During the current year the increased interest of the friends of Wesleyan in the affairs of the College has been manifested in many ways. The enthusiastic meetings of the Alumni Associations in New York, Boston, and Philadelphia, the organization of new Associations in Chicago and Wilkesbarre, and the expressions of encouragement from more private sources, all indicate a rising tide of loyalty to Alma Mater and of devotion to her interests. The spirit of the undergraduates during the year has been most commendable and gives new proof that the evil traditions of college life are steadily yielding to more manly and scholarly impulses; and one of the encouraging signs is the growing fealty of the students to Wesleyan. In college and out the talk and thought are full of hope.

ALUMNI NOTES.

CHICAGO WESLEYAN UNIVERSITY CLUB.—Since the last issue of THE BULLETIN a Central Wesleyan University Club has been organized in Chicago. The Club held its first meeting and dinner at the Hotel Richelieu, Chicago, on the evening of Thursday, Feb. 23d. Nearly fifty were present, representing classes all the way from '38 to '87, and the occasion was most enjoyable, and of very hopeful augury for the future of the club. Professor A. F. Nightingale, '60, acted as toastmaster. The College was represented by Acting President Van Vleck; the Trustees, by Hon. Augustus L. Smith, '54, of Appleton, Wis. Rev. Joseph Cummings, LL. D., of '40, formerly President of Wesleyan, and now President of the Northwestern University, spoke on "The Educational Profession"; Frederic W. Clark, '70, of Chicago, on "University Education for Business Men"; and Orange Judd, Esq., '47, on "The Press." To the

energy and loyalty of Mr. Orange Judd and his sons—G. T. Judd, '83, and J. S. Judd, '85—who are now associated with him in the conduct of the *Prairie Farmer*, the organization and successful starting of the club are largely due. The other toasts were, "The Medical Faculty," Prof. M. P. Hatfield, '70; "The Pulpit," Rev. T. M. Caldwell, '62; and "The Bar," E. Hitchcock, Esq., '79.

The following officers were elected for the coming year: President, F. W. Clark, '70; Vice Presidents, Hon. A. L. Smith, '54, and Prof. A. F. Nightingale, '66; Treasurer, E. Hitchcock, '79; Secretary, L. N. Johnson, '84; and an Executive Committee consisting of these officers, with Prof. R. L. Cumnock, '68, and J. S. Judd, '85.

ALUMNI TRUSTEES.—The following communication has been received from Rev. Joseph Pullman, D. D., of '63 :—

Next to an able faculty the first need of a college is a body of loyal alumni. These are her natural recruiting officers. If the alumni are faithful and enthusiastic for Alma Mater, they surpass all other agencies of advertising. "Get a good thing and then advertise it," say the shrewd men of business. Let the Trustees see that there is no padding in the Faculty, and let the Alumni make sure that all the young aspirants for college training within their reach shall be thoroughly informed of the attractions of Wesleyan. The character and work of our graduates have often been praised among ourselves, in our alumni meetings and class reunions; but have we been equally ready to assert to strangers the good services of Alma Mater, and to insist that no institution of its grade in the land furnishes more thorough instruction or more wholesome preparation for life?

The bond that unites the men of Wesleyan together is a strong one. Quintilian said that "to have been instructed in the same studies is a not less sacred bond than to have been initiated in the same sacred rites." In Wesleyan we passed under the same intellectual training, and felt the benediction of the same Christian faith. Our teachers were scholars and Christians. And it was this mingling of religious and intellectual life that led Gilbert Haven, in reviewing college days, to say, "I shall ever place highest in memory, sacredest in my heart, frequentest in my recollection, the days that I have just terminated."

But there has been one serious drawback to the influence of the Alumni for the growth of our College. We are scattered over a vast continent, and it has been impossible to keep in touch with the institution. "Out of sight, out of mind." Only a few can visit the College in person, and the facilities for securing information of its affairs have hitherto been scant. The beautiful buildings, the enlarged and elective courses of study, the modern appliances and methods of instruction, and above all the splendid work of the Faculty, would be a revelation to many of the "old boys" who graduated with the writer twenty-five years ago. We were born "out of due time." Some of us, however, have our revenge in the fact that we have children training in the same dear old halls. And

now, in order to neutralize this isolation and to bring every Alumnus into direct and close relations with the College, it is proposed to bring before the Legislature of Connecticut a measure which will doubtless become a law, whereby all graduates, "whether honorary or in course," shall be entitled to vote for the Alumni Trustees. There are ten Trustees elected by the alumni. Two are elected each year, the term of service being five years. The following is the plan proposed:—On or before April 1st of each year, the Librarian of the College shall invite each Alumnus "to return a written nomination of three persons for each vacancy, and the six persons receiving the highest numbers of votes cast shall be the nominees of the Alumni. The names of the nominees shall be reported by said Librarian to each Alumnus during the last week in May; and each Alumnus shall be entitled to return a written vote in a sealed envelope for two of the said nominees, which vote shall be opened at the Annual Election of the Alumni Trustees in Middletown on the day preceding Commencement, and shall then be counted together with the votes of the Alumni personally present; but no person shall have more than one vote." This is the substance of the scheme. It varies slightly from the method adopted in some other colleges. Already Amherst, Yale, and Cornell have adopted a similar scheme for the voting of absent Alumni.

The advantages to the College from this system of voting will be very considerable. Every Alumnus will find himself summoned each year to take action in her interest. To do this intelligently, he will need to keep himself informed about her affairs. He will cultivate the acquaintance of his fellow graduates; and on every chance meeting with any of them, one subject of conversation will certainly be, the eligible men for next year's election.

As one of the great class of '63, a class that "has never been quite equaled in the history of Wesleyan," the writer bids Acting President Van Vleck and the old College—God speed.

JOSEPH PULLMAN.

COMMENCEMENT.—It is expected that Commencement Week will, this year, bring back an even larger number of Alumni than usual, to visit their Alma Mater. The unusual interest manifested in the College during the past year by the Alumni, the important questions to come before the Trustees at their annual meeting, and the character of the various anniversary exercises—all will combine to make the week more than usually attractive.

The programme of the week is as follows: Sunday morning, June 24, Baccalaureate Sermon by the Rev. A. S. Hunt D. D. Sunday evening, University Sermon, by Rev. T. T. Munger, D. D.

Monday, June 25, Class Day Exercises in the afternoon; Annual Glee Club Concert in the evening.

Tuesday, June 26, Meeting of the Trustees at 9 A. M. Annual meeting of the Alumni Association at 10 A. M. In the afternoon, Social Receptions by the College Fraternities at their Club Houses.

Wednesday, June 27, Annual Meeting of the Phi Beta Kappa Society, at 9 A. M. In the afternoon, Reunion of Classes of 1838, '63, '73, '78, '81, and '85. In the evening, Quinquennial of the Xi Chapter of the Psi Upsilon Fraternity; Address by Rev. Geo. H. McGrew, M. A.; Essay, by Geo. L. Roberts, M. A.

Thursday, June 28, Commencement Day. Commencement Exercises at 10:30 A. M.; Annual Commencement Dinner at 2 P. M.

SHALL I GO TO COLLEGE?

This question undoubtedly is more or less agitating the mind of many a student in the high schools and academies. And, as often as the question is raised, obvious reasons suggest themselves for a negative answer. A college course necessarily involves a heavy expense for the young man or for his parents. It postpones for four years the much coveted position of independence and self-support. It may also postpone the period when he can possess the dignity and the delight of establishing himself in a home of his own. He cannot help asking, "Will it pay for the sacrifice? Is a college diploma worth what it costs?"

The mere fact of graduation, with the prestige which it gives a man at the outset of his career, is not worth what it costs. A college diploma is only a very formal letter of recommendation. As such, it often helps a young man to gain a situation which he could not otherwise gain. But no letter of recommendation can make success attend upon inefficiency. For good or for evil, a man very speedily passes the point at which his diploma can serve him.

But, for those who have some natural or acquired love of study and of intellectual activity, the stores of knowledge, and mental power, and the greater capacity for influence and usefulness which a college course can impart, are worth far more than they cost. To acquire a sound and methodical, even though it be a superficial, acquaintance with the questions of science and philosophy and history which have occupied the attention of the world's great thinkers,—to learn to appreciate the pure, abstract truth of mathematics and metaphysics,—to learn something of the far-reaching laws and wonderful processes of nature,—to contemplate the problems of present society in the light of the history of institutions in the past,—to broaden one's knowledge of human life and character by gaining an introduction to the literature of other times and other lands and other tongues,—to toughen the fibre of the logical understanding by grappling with intricate processes of reasoning,—to cultivate taste and imagination by studying the masterpieces of literature,—to acquire, by practice under competent critics, and by imitation of the best models, the power of vigorous and elegant expression of thought in language,—to gain the general intellectual quickening which comes from spending four years in intimate association with men whose lives have been consecrated to thought and study, and with young men whose fresh and enthusiastic minds are fired with noble scholarly

aspiration—these things are worth to those who can appreciate them far more than they cost.

The value of the college course is not wholly nor chiefly in fitting men for any profession. The aim and spirit of the college are very different from those of the professional school. The professional school aims to make ministers, physicians, lawyers, engineers; the college aims to make men. The professional school trains a man to do something; the college trains a man to be something. The college teaches the branches of learning which are the foundation of the practice of various professions, but it does not teach those studies from the professional standpoint. It teaches Greek and rhetoric, but not exegesis and homiletics; it teaches anatomy and physiology, but not surgery and medicine; it teaches the history of institutions, but not the practice of law; it teaches mathematics, but not engineering; it teaches chemistry, but not pharmacy and metallurgy.

The college, then, is the place, not for men contemplating entrance into a certain limited number of professions and occupations, but for all men—and women—who aspire to the larger intellectual life and the greater means of usefulness to which a college training leads. And, as the college welcomes to its halls students widely differing in tastes and talents and professional plans, it no longer insists on putting them through the same course of study. The exclusive classical and mathematical regimen of a half-century ago is about as thoroughly obsolete as the *trivium* and *quadrivium* of the scholastic ages. The college recognizes the truth that a liberal education may be obtained from widely varying combinations of studies. For instance, Wesleyan University offers three parallel courses of study, one including both Greek and Latin, one including Latin but not Greek, and one including no ancient language whatever. Within the limits of each of these courses a wide range of elective studies is offered. The intention is to have some work required in such a number of departments as to afford a broad and liberal culture, while giving each student an opportunity for more extended study in those branches which natural tastes or professional plans render especially attractive.

But the question is asked, will not the training of the professional school suffice for a professional man without the college training? For the routine work of his profession, in some cases, yes; but, for the highest development of broad and generous manhood, for the attainment of the general influence and usefulness in society which belongs to the truly educated man, and for the best professional success, no. A man can amputate a leg without any knowledge of history or zoology; but to obtain the highest usefulness which belongs to the medical profession he must know something besides mere technique. A lawyer can gain cases without college training, but that training will help him to be an able and better lawyer. Especially should the young man preparing for the ministry of the gospel regard the college course as indispensable. If financial or other limitations compel him to choose between the college course and the theological course, let him by all means make sure of the former. In that work, speed and technical training is of far less importance than vigor and breadth of thought and sympathy with the mental life of the age.

There is an idea abroad that business men do not need a college education. Most certainly, the largest fortunes are made without it, and but few business men have it. But the mental training which college gives is useful in the conduct of affairs; and the getting of money is not, or at least should not be, the sole object in life of the business man any more than of the professional man. The rôle of the business man in our modern life is a very important one. What has been called mercantilism—the placing of wealth above intellectual power and the serving of society—is one of our threatening evils. For leading business men, the broader culture, the better understanding of the problems of life and society, the loftier ideals, and the capacity of larger influence which the higher education gives, are much to be desired. The present tendency toward college among young men who expect to devote themselves to commercial pursuits is among the promising signs of the times.

For all persons, in short, the value of a college education is not in preparation for the work of any particular station, ordinary or exceptional. A mind possessed of the taste and capacity for study is worth educating, whatever position in life its possessor may be destined to occupy. And a well educated mind in any station will find in its education rich resources for happiness and usefulness.

It is hardly necessary to add that the value of a college education is attested by the position and work of those who have received it. According to published estimates, only one half of one per cent. of the men in this country are college graduates, and yet these have furnished about one third of the members of the U. S. House of Representatives in three consecutive Congresses; and about one half of the Senators and Vice-presidents, two thirds of the Presidents and Secretaries of State, and seven eighths of the Justices of the Supreme Court have likewise come from this small contingent of college men. Of the eleven members of the Board of Bishops of the M. E. Church in the United States, chosen from several thousand clergymen, eight are graduates of colleges, and five of Wesleyan University. Of the eight elected at the last two sessions of the General Conference, seven were college graduates, and five were alumni of Wesleyan.

WESLEYAN UNIVERSITY TO-DAY.

It has been thought that some brief statement of the present condition and work of the College may be of interest to such of its alumni and friends as are not familiar with the later development of its facilities, as well as to persons who are thinking of entering college.

THE CITY OF MIDDLETOWN.—Middletown, the seat of Wesleyan University, has about 12,000 inhabitants. The city is picturesquely situated on hills that rise from the west bank of the Connecticut River, nearly thirty miles from its mouth. The college campus and buildings are on high ground half a mile from the river. The city maintains an efficient system of schools, is lighted with

electric lights, and has adequate systems of water-works and sewerage, a line of horse-cars, and free postal delivery. It is the seat of the Berkeley Divinity School of the Protestant Episcopal Church. Russell Library is open free to students, as well as to citizens. The Methodist Episcopal, Congregationalist, Protestant Episcopal, Baptist, Universalist, and Roman Catholic Churches have commodious edifices.

Middletown is at the junction of the Connecticut Valley, and Boston and New York Air Line railways. A branch road to Berlin connects the city with the main line of the New York, New Haven and Hartford railway. The distance from Middletown to New York is 98 miles; to Boston 115. The fastest express trains run between Middletown and New York or Boston in about three hours. During the period of navigation steamboats running between Hartford and New York touch regularly at this city.

As a situation for a college Middletown possesses the advantages of central location between large cities, the conveniences of a city, the out-of-door enjoyments of the country, and the social life of a wealthy, busy, intelligent and conservative community. It is a quiet and pleasant place for residence without the distractions of a large city.

MATERIAL EQUIPMENT OF THE COLLEGE.—The principal buildings of the College are the following:—North College, a dormitory with accommodations for 80 students; South College, containing lecture-rooms and apartments for students; Memorial Chapel, containing an upper audience room with 600 seats, and, on the lower floor, a chapel, lecture-room, and the room of the Young Men's Christian Association; Rich Hall, or the Library, with shelf room for 90,000 volumes; Judd Hall, containing lecture-rooms, chemical and biological laboratories, and the museum; Observatory Hall, containing the telescope, physical lecture-room and laboratory, and rooms for 20 students; Transit House, containing astronomical apparatus; Gymnasium; Ladies' Dormitory, outside the campus. The college campus comprises ten acres, and contains excellent athletic grounds, with foot-ball and base-ball grounds and tennis courts.

The property in the hands of the Treasurer of the University at the close of the last fiscal year was about \$1,170,000. Of this about \$510,000 was in real estate, library, museum, apparatus, &c., and \$660,000 was in the nature of permanent endowment. The total income for the year was \$51,288.17, of which \$39,786.04 was from rents and interest on invested funds, and \$11,502.13 from students' bills and miscellaneous sources.

It is anticipated that the income for the present year, though somewhat diminished by reason of lower rates of interest, will not vary materially from the foregoing figures. In addition to this, the University has come into receipt during the present year, of an income of \$5,000 from the fund recently given by George I. Seney, Esq., for the establishment and maintenance of competitive scholarships.

The resources of Wesleyan are applied solely to the maintenance of a college of liberal arts, and for this purpose its means compare favorably with those of

most of the well known and best reputed colleges of our land. In respect of endowment fund it ranks among the strongest of the purely collegiate foundations of New England.

The Library contains over 36,000 volumes. During the past year 1,400 volumes have been added. \$1,100 is spent annually for the increase of the Library. In making additions to the Library the needs of the undergraduates are especially considered. The Library is open every week day of the term, and students are allowed direct access to the shelves. The college maintains two reading-rooms; one in North College, for daily and weekly newspapers; the other in Rich Hall, for magazines and reviews.

The Astronomical Observatory contains a twelve-inch telescope by Alvan Clark, and is fully equipped for purposes of college instruction. Students in the elective classes in Astronomy are taught the use of all the instruments of the Observatory. The Chemical, Physical, and Biological Laboratories are well furnished, and afford the student ample opportunities for practical work in these departments.

The Museum contains about 135,000 specimens in the departments of Geology and Biology. The Museum is arranged with special reference to educational purposes, and the collections are freely accessible to students.

The College offers prizes and scholarships to the amount of \$6,000 annually. Of the scholarships, forty-eight, established by George I. Seney, Esq., are awarded, on the basis of the merit roll, in equal numbers to each of the four classes. They range from fifty to one hundred and fifty-five dollars each. In addition to the above, a number of Tuition Scholarships, exempting the holders from the charge for tuition, have been established by the Trustees, and are available, at the discretion of the President, for the use of deserving students who need pecuniary assistance.

COURSES OF STUDY.—To meet the varied educational demands of the times, the College offers to its undergraduate students the option of three parallel courses of study, each extending through four years.

I. The Classical course, leading to the degree of Bachelor of Arts. The candidate for admission to this course is examined on the following subjects:—Latin, Greek, Ancient History, Mathematics, and English. These subjects the student in the Classical course is also required to pursue during Freshman and Sophomore years, in connection with a limited number of elective studies. In Junior and Senior years numerous elective courses are offered.

II. The Latin-Scientific course, leading to the degree of Bachelor of Philosophy. The candidate for admission to this course is examined on all the subjects required for admission to the Classical course except Greek, for which French or German is substituted. During his college course the student in the Latin-Scientific course has open to him all the courses offered by the College, except those in Greek.

III. The Scientific course, leading to the degree of Bachelor of Science. The candidate for admission to this course is examined in Arithmetic, Algebra, Plane and Solid Geometry, Plane and Spherical Trigonometry, English, and French or German. During his college course the student in the Scientific course has open to him all the courses offered by the college except those in Latin and Greek.

Examinations for admission will be held this year on June 29th and 30th, and on September 12th and 13th.

Ladies are admitted to equal privileges in the University with gentlemen.

Students are admitted to special courses and to advanced standing on complying with prescribed conditions.

THE ELECTIVE SYSTEM.—The following principles have decided the introduction and development of the elective system of studies in Wesleyan University:—

1. Every liberally educated person must have an elementary knowledge of a considerable variety of subjects, and a training in various modes of thought. Hence the desirability of required studies in each of the main departments.

2. In the latter part of the course the student will be better prepared than in the earlier part to select the branches to which taste or professional plans will lead him to pay special attention. Hence the advantage of increasing freedom of election in the successive years of the course.

3. The varied views, needs and opportunities of different students are best met by combining definite curricula (the Classical, Latin-Scientific, and Scientific) with large liberty of election.

DEPARTMENTS OF INSTRUCTION.—The range of college instruction may be indicated by the following brief statement: There are in the College thirteen departments of instruction. The whole number of yearly or half-yearly courses in these departments is 54, divided as follows:—Latin, 4; Greek, 5; Modern Languages,—German, 3; French, 2; Rhetoric and English Literature, 5; Elocution, 2; History and Political Economy, 4; Philosophy, 4; Ethics and Christian Evidences, 2; Mathematics and Astronomy, 6; Physics, 4; Chemistry, 4; Geology, 4; Biology, 5. The catalogue contains a full description of the scope of these courses.

METHODS OF INSTRUCTION.—The object of the required studies is to give the student, along with mental discipline, such an outline of each subject as will open to him an intelligent view of the subject as a whole, and form a proper basis for advanced study. In the elective courses, the opportunity for specialization in chosen lines is of course larger, and the student is encouraged to investigate

subjects for himself. The more intimate relation between student and teacher, especially in the advanced studies, and the better opportunity for work in the true scholarly spirit, have wrought a great change in the college education of late years. It is no longer the reading of text-books and recitation upon their contents. It involves the use of many books, and much independent study, and gives opportunity for original thought and work. In the departments of natural science the pupil is brought into immediate connection with the phenomena of nature; and, by examining specimens, handling apparatus, and performing actual experiments in the laboratories, learns to observe and think for himself. In the other departments methods more or less analogous are followed. It is the unanimous opinion of the instructors that all this has led to more faithful as well as more scholarly work in college.

GOVERNMENT.—The government of the College is based on the presumption that the average student has reached such maturity that he can justly be made to a very large extent the master of his own conduct. The regulations of the College are, therefore, for the most part those prudential rules necessary to the orderly working of the complicated system of courses of instruction under elective methods. When it is evident that a student is persistently wasting his time, or indulging in immoral practices, his connection with the College is severed. As changes in regulations have been made from time to time, they have been in the direction of greater liberty for the student and of more intimate and harmonious relations between students and Faculty. The Faculty believe that there has been a steady growth in the self-restraint and self-reliance of the students, and that there is among them to-day a higher appreciation than ever before of the advantages which the College offers them.

EXPENSES.—The following statement of expenses for a college year is based on estimates furnished by members of the present senior class, and represents the actual cost of living in a comfortable, though economical, manner. Room rent, \$24; furniture (annual average), \$10; fuel and light, \$10; board, \$115; washing, \$16; books and stationery, \$25; college bills (exclusive of tuition), \$27. The regular charge for tuition is \$75. This charge may be remitted in the case of worthy students who need pecuniary aid.

A considerable number of the students keep their expenses (including in addition to the above-mentioned items, those for clothing, traveling, and sundries) below \$300, and the expenses of the average student range from \$325 to \$400. It is constantly demonstrated that a student loses neither college honors nor social standing by the practice of great economy in living. Good health, adequate preparation, faithful work, and a persevering spirit will enable almost any student of good ability to complete the course, however slender his purse may be when he enters. No able, earnest, scholarly young man need shrink from undertaking a college course for lack of funds.

CATALOGUE.—The College Catalogue of the present year furnishes an unusually large amount of information concerning the College. A copy will be forwarded to any address on application to the President.

HISTORY IN THE PREPARATORY SCHOOLS.

THE BULLETIN may not improperly refer, occasionally, to topics in which the college and the preparatory schools have a common interest. Frequent inquiries have been received, for instance, as to the nature of our admission requirement in Ancient History. It is on this account, rather than because this requirement is of pre-eminent importance, that a few remarks upon it may not be out of place.

The Catalogue contains the following statement of the requirements for admission in Ancient History and Geography: "History of Rome to the death of Marcus Aurelius; History of Greece, to the capture of Corinth; Ancient Geography. The amount of historical knowledge required for this examination may be obtained from the following books:—Cox's or Smith's Smaller History of Greece; Leighton's History of Rome (of which the introduction, and chapters i., ii., iv., xxix., xlvii., lv., lvi., lxx.—lxxx., may be omitted). Tozer's Primer of Ancient Geography is recommended as the basis for instruction in Ancient Geography, and familiarity with map-drawing is especially desirable."

The College does not intend by this statement to require the use of the particular text-books named, nor to suggest that the class-room work consist of page-by-page recitations from these books. The books are named simply that the teacher may thus get some idea of the amount of knowledge required. It is earnestly desired that the preparatory schools adopt the most approved methods of teaching history, and give serious attention to this department of work, for the foundation laid in the preparatory school materially affects all the work in history, ancient and modern, which is done in the college course. The college desires that two things shall be thoroughly done in the preparatory course in history: 1. That the pupil shall gain an orderly knowledge of the common-places of political history, which shall be his perpetual possession. In the college course he will be taught concerning the social life, government, art, and literature of various peoples, and will discuss the so-called philosophy of history. He cannot understand these subjects as he ought unless he has in mind the ordinary facts of political history. For example, the college class may be studying the career of Themistocles. The college instructor has a right to expect that the class will know the main facts about the public career of Themistocles, whether he lived before or after Pisistratus, whether he was contemporaneous with Alexander the Great or not, and the main facts about Pericles and other Greek statesmen with whom Themistocles would naturally be compared. If the college class is studying the reign of Queen Elizabeth, the instructor has a right to presume that the student knows the main facts relating to the ages of Pericles and Augustus. Surely history can be so taught that a considerable number of orderly arranged facts will be as much a perpetual mental possession as the multiplication

table. 2. In connection with work in history in the preparatory school, the pupil should be trained in proper habits of reading for information. The tendency at present is to give the pupil too much collateral reading, and to omit to show him how to read in such a way as to glean important information from books and fit it into the outline of knowledge which he memorizes for the recitation. In all kinds of college work the success of the student depends very largely on his ability to retain vividly and methodically what he has read. The college graduate is much more likely to be successful in his life work if he has this power. It does not seem too much to ask that this invaluable habit be formed along correct lines in the preparatory school. The method is vastly more important than the amount.

Map-drawing is now so generally taught in elementary schools that it is reasonable to expect that the applicant for admission to college will be able to draw a sufficiently accurate map of Italy or Asia Minor in a minute or two, and to locate on it the principal towns, rivers, etc. He would be considered a poor teacher of geography in a grammar school whose pupil could not do this for Maine or France. Especial attention is called to this as a matter which our entrance examination papers show is generally neglected, and which has an important bearing on college work in history.

—THE—

Wesleyan University Bulletin.

MIDDLETOWN, CONN.

OCTOBER 15TH, 1888.—No. 3.

THE college year at Wesleyan opens auspiciously. In THE BULLETIN of April last, mention was made of the increasing interest which the friends of the College had manifested, in many ways, during the past college year. The hope that this interest might find further proof in an increase of the number of students, has certainly been realized. The registrar's lists show 218 students now in college. This is a gain of 28 over last year, and is the largest number of students ever in attendance here at any one time. The largest attendance in any previous year was 202—the number enrolled in the catalogue of 1885-86. The Freshman Class this year contains 70 members; this is the largest class that ever entered Wesleyan University.

The three chairs—of History, Philosophy, Latin—were filled by the Trustees at their annual meeting in June last, so that the number of men in the Faculty holding the full rank of Professor is now larger than ever before.

But very few students have fallen out this year on account of deficient scholarship or other reason; and there is evidently in the student community an earnest, hopeful temper, and a disposition to make the most and best use of the enlarging facilities of the college.

NOTES OF THE LAST COMMENCEMENT.

From the records of the last Commencement season a few items are here set down which may be presumed to be of general interest to our alumni.

TRUSTEE MEETING.—The annual meeting of the Trustees was held on Tuesday of Commencement week, and was attended by an unusually large number of members. A summary of the more important measures adopted at that time is here given.

The following members of the board, whose term of office expires in 1889, were reëlected for the regular term of five years from that date,—William Hoyt, Bowles Colgate, Samuel T. Camp, Phineas C. Lounsbury, Anderson Fowler, and Mark Hoyt.

Rev. Bishop D. A. Goodsell, D. D., C. L. Rockwell, J. S. Spinney, and Hon. G. West were elected to fill vacancies caused by the deaths during the year of Rev. Bishop W. L. Harris, D. D., LL. D., Rev. Daniel Curry, D. D., LL. D. Stephen Barker, and Payne Pettibone.

At the preceding annual meeting a committee had been appointed to present for the consideration of the board suitable candidates for the Presidency of the University. This committee consisted of the following gentlemen: William M. Ingraham, M. A., William Hoyt, Rev. J. M. Buckley, D. D., Rev. Bishop E. G. Andrews, D. D., LL. D., Rev. William Rice, D. D., Rev. Joseph E. King, D. D., Hon. Geo. G. Reynolds, LL. D.

The committee had not reached a decision in the matter entrusted to its consideration, and therefore recommended that the election of a President be postponed and the committee allowed to continue its deliberations. This action was adopted. An extract is appended from the original report, stating the reason for the recommendation:—

“We are not prepared to make a nomination with that degree of unanimity which we deem desirable. It seems to us unwise to present a number of names and thereby occasion a division in the board, while the probabilities are that by a longer delay and a further investigation an approximate unanimity might be reached. We are the more impressed with the wisdom of postponing an election at this time, in view of the fact that the prosperity of the college the past year gives us assurance that we may safely trust the administration of its affairs in the hands of the present Acting-President until the man can be found who, in the united judgment of the board, combines the various characteristics which promise a successful career in the Presidency of the University.”

The only changes in the Faculty, therefore, consisted in the election of Woodrow Wilson, A. C. Armstrong, Jr., and E. T. Merrill to the chairs, respectively, of History and Political Economy, Philosophy, and Latin, which had been temporarily filled by instructors, and in the advancement of Associate Professor Conn to the full professorship in Biology. Mr. A. L. Treadwell, of the class of '88, was appointed Assistant in Natural History.

The increase in the estimated current expenses for the ensuing year was at least partly provided for by a generous subscription of \$2,200 from thirteen of the Trustees.

In accordance with earlier recommendations, it was ordered that the last Wednesday, instead of the last Thursday, in June be the Commencement Day in the future.

The only other action of general interest was one that had been unanimously recommended by the Faculty some years before, and had this year received the hearty approval of a large majority of the alumni in their annual meeting. As adopted by the Trustees, the recommendations are as follows:

1. That after Commencement Day, 1891, the degree of M. A. be no longer conferred in course.

2. That thereafter the general condition for obtaining the degree be non-professional graduate study, either at Wesleyan or elsewhere.

3. That the particular conditions concerning length of time during which such study must be pursued, and concerning examinations to be passed, be referred to the consideration of the Faculty, with the understanding that recommendations in regard to the same be submitted to the Trustees as early as practicable.

4. That the degree of M. A. be hereafter conferred as an honorary degree only in rare cases.

FINANCIAL EXHIBIT.—The financial condition of the College may be indicated by the following abstract of the annual exhibit of the Treasurer.

PROPERTY OF THE UNIVERSITY.

Old College Buildings and Lands, - - - - -	\$155,000 00
Observatory Hall, - - - - -	15,000 00
Gymnasium Building, - - - - -	5,000 00
Rich Hall, - - - - -	45,000 00
Memorial Chapel, - - - - -	75,000 00
Orange Judd Hall, - - - - -	105,000 00
Scientific Instruments and Apparatus, - - - - -	27,550 00
Natural History Museum, - - - - -	33,480 00
Library, - - - - -	45,000 00
Organ, Furniture, and other Fixtures, - - - - -	3,000 00
Invested Endowment Funds, exclusive of the Seney Scholarships, - - - - -	672,903 95
Seney Scholarship Fund, - - - - -	100,000 00
	\$1,282,533 95

The receipts and expenditures for the college year 1887-88 were as follows:

RECEIPTS.

From rents and invested funds, - - - - -	\$33,565 57
From students' bills, - - - - -	11,591 69
From other sources, - - - - -	896 25
Total receipts for the year, - - - - -	\$46,053 51

EXPENDITURES.

Salaries, - - - - -	\$36,300 00
Coal, gas, water, - - - - -	1,949 29
Repairs, - - - - -	1,928 98
Catalogues, printing, advertising, postage, stationery, - - - - -	1,787 32
Janitorial service, labor, - - - - -	2,565 88
Other expenses, - - - - -	6,929 21

Total expenditures for the year, - - - - - \$51,460 68

As will be seen from the above figures, the expenditures of the year exceeded the income by \$5,406.97; this deficit, however, was more than covered by a surplus of \$6,064.31, brought over from the previous year.

The above exhibit does not include receipts and disbursements on the Seney Scholarship Fund, or on the Alumni Library Fund. The income from the Seney Scholarship Fund amounted last year to \$5,000.00; the income from the Library Fund, to \$1,023.68.

ALUMNI ASSOCIATION.—The meeting was held on Tuesday of Commencement week instead of Wednesday, in accordance with the action of the previous annual meeting. The change seemed entirely satisfactory. A fraternal communication was received from the lately organized Wesleyan University Alumni Association of California and a committee appointed to reply. The advisability of change of name of the University was discussed and the executive committee were requested to endeavor, by correspondence or otherwise, to ascertain the views of the alumni in general. Rev. Bishop E. G. Andrews, D. D., LL. D., '47, and Rev. J. E. King, D. D., '47, were reelected alumni trustees. A motion favoring the proposition brought before the Board of Trustees at their meeting a year before, that after three years the degree of Master of Arts be no longer given without examination, elicited a very lively debate, but was passed by an almost unanimous vote. Other matters of interest were discussed. The spirit of the meeting was one of enthusiastic loyalty to *Alma Mater*, and hope for her future.

The following are the officers of the Association for the present year:

W. P. Hubbard, '68,	-	-	-	-	-	-	-	<i>President.</i>
W. T. Elmer, '57,	-	-	-	-	-	-	-	<i>1st Vice-President.</i>
W. D. Leonard, '78,	-	-	-	-	-	-	-	<i>2d Vice-President.</i>
G. H. McGrew, '70,	-	-	-	-	-	-	-	<i>3d Vice-President.</i>
W. N. Rice, '65,	-	-	-	-	-	-	-	<i>Recording Secretary.</i>
M. B. Crawford, '74,	-	-	-	-	-	-	-	<i>Corresponding Secretary.</i>
F. M. North, '72,	-	-	-	-	-	-	-	<i>Treasurer.</i>
C. T. Winchester, '69,	-	-	-	-	-	-	-	<i>Memorialist.</i>

EXECUTIVE COMMITTEE.

D. W. Northrop, '68,	J. S. Camp, '78,
W. O. Atwater, '65,	C. E. Bacon, '78,
A. C. True, '73.	

DEGREES AND HONORS.—Degrees and Honors were conferred last Commencement upon the members of the graduating class as follows:

The degree of B. A. was conferred on Frederic Gibbs Axtell, Harry Harvey Beattys, William Evans Bruner, Edward Washington Burke, Henry William Camier, William Morton Cassidy, Charles Phillips Cooper, Ernest Russell Deane,

William Elliott Foster, Roland Wilkins Guss, Morton Lee Hall, George Demster Hamlen, Frederic Hobart Lawrence Hammond, Howard Hornbeck Hawxhurst, Fred Alexander Hillery, Thomas Arthur Humason, Robert Seney Ingraham, Arthur Wilson James, William Avery Knox, Harry Keiser Munroe, Theophilus England Niles, Theodore Richards, William Barnard Smith, Thomas Dudley Wells, Mary Elizabeth Smith Mendall, Kate Bertha Mitchell.

The degree of Ph. B. was conferred on Harvey William Fellows, Henry Pinnie Griffin, Charles Minot Griffith, Frederic William Lange, George Levi Rice, Herbert Lowell Rich, Marcus White, Alice May Hotchkiss.

The degree of B. S. was conferred on John Law Bridge, Aaron Louis Treadwell.

The following members of the class graduated with honors of the first grade in general scholarship, indicating that their general standing for the whole course was 88 per cent. or more of the maximum: William Evans Bruner, Fred Alexander Hillery, Arthur Wilson James, Kate Bertha Mitchell, Marcus White.

The following members received honors of the second grade, indicating that their standing for the course was 83 per cent. or over: Frederic Gibbs Axtell, John Law Bridge, William Morton Cassidy, Ernest Russell Deane, Roland Wilkins Guss, Frederic Hobart Lawrence Hammond, Howard Hornbeck Hawxhurst, Alice May Hotchkiss, Robert Seney Ingraham, Mary Elizabeth Smith Mendall, George Levi Rice, Herbert Lowell Rich, William Barnard Smith, Thomas Dudley Wells.

In special departments, honors were conferred as follows:

In Greek.—Frederic Gibbs Axtell, Robert Seney Ingraham, Mary Elizabeth Smith Mendall.

In Modern Languages.—Charles Minot Griffith, Frederick William Lange, Aaron Louis Treadwell.

In English Literature.—Fred Alexander Hillery, Alice May Hotchkiss.

In History and Political Science.—John Law Bridge, William Morton Cassidy.

In Philosophy.—Arthur Wilson James.

In Biology.—Frederick William Lange, Aaron Louis Treadwell, Howard Hornbeck Hawxhurst.

The Rich Prize for the best Commencement oration was awarded to Roland W. Guss.

Honorary degrees were conferred as follows:

The degree of M. A. on Rev. George Murray Colville, of Binghamton, N. Y.; William Healey Dall, Paleontologist of the U. S. Geological Survey; and Rev. Elijah Roberts Watson, Professor of Modern Languages in the University of Southern California.

The degree of D. D. on Rev. Herbert Franklin Fisk, Professor in the Northwestern University; Rev. Edmund Mead Mills, of Syracuse, N. Y.; Rev. James E. C. Sawyer, of Troy, N. Y.; and Rev. John Rhey Thompson, of New York City.

The degree of LL. D. on George Brown Goode, Assistant Secretary of the Smithsonian Institution, and Curator of the National Museum.

NOTES OF THE OPENING YEAR.

ADMISSION BY CERTIFICATE.—In accordance with instructions contained in a resolution of the Board of Trustees, passed at their meeting in June, 1887, the Faculty have adopted a plan whereby students from certain designated preparatory schools may be admitted to Wesleyan University by certificate, without examination. This plan, confessedly a tentative one, will be thoroughly tested, and if found consistent with the maintenance of the requisite grade of preparatory work on the part of candidates for admission, will be continued. The following extract from the circular letter sent to the principals of preparatory schools expresses the desire of the Faculty in this regard:

“It is hoped that this mode of admission, so far from tending to diminish the amount or thoroughness of preparatory study, will set a premium upon the best work. To this end, it is expected that no student will receive a certificate recommending him for admission to this college who has not performed *in a thoroughly satisfactory manner* the work testified to in his certificate.”

THE NEW PROFESSORS.—Professor Woodrow Wilson, who takes the chair of History, is a graduate of Princeton College in the class of 1879. After leaving Princeton he pursued a course of law studies in the University of Virginia, and was admitted to the Georgia bar in 1882. After a year's practice, however, he relinquished the profession of law, in order to devote himself to political and historical study; and in 1883 he entered Johns Hopkins University. From this institution he received in 1886 the degree of Doctor of Philosophy. The thesis presented for this degree formed the basis of Professor Wilson's book on Congressional Government, published by Houghton, Mifflin & Co., three years ago. In 1885, Mr. Wilson was elected Associate Professor of History in Bryn Mawr College, which position he resigned in June last to accept the chair in Wesleyan. Professor Wilson has been a contributor to *The New Princeton Review*, *The Atlantic Monthly*, *The International Review*, and other periodicals. In 1887 he was chosen non-resident lecturer in Johns Hopkins University, and still holds that position. His course of lectures in Johns Hopkins University for the present year—on Governmental Administration—will be given in February and March next. One year ago Wake Forest College, N. C., conferred upon Professor Wilson the degree of Doctor of Laws.

The Department of Philosophy in Wesleyan has been without a Professor of full rank since the resignation of ex-President Cummings in 1878. Professor A. C. Armstrong, Jun., who now takes this chair, was graduated from Princeton College in the year 1881. During the last year of his academic course he won the Mental Science Fellowship, on which he pursued philosophical studies at

Princeton for a year after his graduation. In the following years he completed a theological course in the Princeton Seminary, continuing at the same time his special studies in philosophy. In 1885 he went abroad, and spent a year in the University of Berlin. On his return he was elected Associate Professor of Ecclesiastical History in Princeton Seminary, but withdrew his acceptance of the chair in the spring of 1887. Since then, much of his time has been given to editorial work on the *New Princeton Review*. During the latter half of the college year 1887-8, he served as Instructor in the Philosophy of History in Princeton College.

Mr. E. T. Merrill, the newly elected Professor of Latin, is a graduate of Wesleyan in the class of 1881, and was Professor Harrington's assistant in the Latin Department from 1883 to 1886. Of the two years since that time, he spent the first in Europe and the second as Professor of Latin in the University of Southern California.

LECTURES.—The evening lectures, which have been so well appreciated during the past two years, are to be continued during the coming winter and spring. The course will be opened with a lecture by Mr. John Fiske, on Monday evening, December 17th. Other eminent speakers will follow.

CHANGES IN THE COURSE OF STUDY.

In several departments there are this year some changes from last year's programme of instruction, either in subject or in method, or both. The most important of these changes are here noted.

HISTORY.—1. Instead of a continuous course in the history of England alone, the Juniors are offered a course in which the time of the class will be about equally divided between the history of England and the history of France. The plan of instruction contemplated will advance the histories of the two countries, as nearly as may be, with equal steps, by some method of alternation, with the double object of affording clues to general European history and of setting the history of the English race in its European connections.

2. Instead of a course in the political history of the United States, the Seniors are offered a course in the general History of Institutions, the central aim of which will be to place the development of the political institutions and of the politics of the United States in its true historical setting.

PHILOSOPHY.—A course in Logic and Philosophy has been substituted for the Junior elective in Theism. In this course the former part of the year is given to the introduction to philosophy, studied in connection with Stuckenberg's Introduction to the Study of Philosophy, and by lectures. Among the topics

considered are the nature and definition of philosophy; its relation to other departments of thought; its several divisions; its present status; the method and the spirit desirable in its pursuit. The relations of philosophy and science are illustrated by readings in the logic of induction and modern scientific method. The concluding portion of the year will be given to the History of Ancient Philosophy. By this latter change it is hoped to secure time at the end of the senior year for a careful completion of the philosophical curriculum as a whole.

ENGLISH LITERATURE.—The senior class in English Literature will this year study the literature of the period, 1830-1870. The number of authors discussed will be smaller than in previous years, and the attention of the class will be confined, for the most part, to the writings of Carlyle, Tennyson, Matthew Arnold, and Browning.

LATIN.—The only important changes in the Latin department occur in the elective courses. A new elective course is offered in the rapid reading of considerable amounts of good literature. This course is open to all who have taken the Freshman required work, and after the current year must be taken before admission is granted to any other elective course. The authors read will be changed next year so that the course may be elected a second time by the same student.

The other elective courses are open to juniors and seniors without distinction, and a further broadening of the possibilities of election is secured by the arrangement of these courses in two groups of two each to be given on alternate years. A detailed statement of the courses may be seen in the University catalogue for the current year.

Regular instruction in advanced work is also offered to graduate students.

GEOLOGY.—In the advanced class in Geology, Leconte's Elements is to be used as a text-book for the first two terms the present year, as in former years; but the work is to be varied to a considerable extent by assigning special topics from time to time to the various members of the class, on which they are to prepare reports or lectures which are to be presented to the class. References to authorities on the respective topics will be given by the instructor.

BIOLOGY.—The only change of note in this department is in the course of Zoology. This course has hitherto been a course of lectures illustrated by specimens from the museum. This year there will be introduced a considerable amount of practical work. For this purpose two hours instead of one have been assigned to each recitation, and when it is desirable the two hours of practical work will be substituted for one hour's lecture. The practical work will be work in dissection and in the study of museum specimens. Most of the anatomy of animals will be studied in this way, thus more completely familiarizing the student with the structure of animals, and leaving the lecture hours free for the discussion of the more general biological principles.

GRADUATE STUDENTS.

Graduates of this or other colleges regularly enrolled here as graduate students are at present admitted without charge to any of the undergraduate courses. The character of the instruction given exclusively to graduate students varies with the departments, and no statement covering all cases can now be made. In the departments in which studies are chiefly carried on in the laboratories, work is laid out for individual students according to the degree of proficiency and the especial circumstances of each. In other departments regular courses may be arranged, in case classes of sufficient size can be organized; while in case only single students present themselves, less formality in instruction may be followed, but a sufficient supervision and direction of study is assured, and the student will have the advantage of coming into more intimate personal contact with his instructor. Prospective graduate students are invited to correspond with the heads of the departments in which they propose to pursue studies, and full information and advice in each case can thus be obtained.

As is indicated elsewhere in this BULLETIN, measures are in preparation looking toward the arrangement of work for the higher academic degrees, but the precise conditions governing the conferring of these degrees are not yet determined. Specific announcements will be made as soon as possible, probably in the next number of this BULLETIN.

EXPERIMENT STATION.

A notable feature of the intellectual progress of our time is the direction of scientific research to the arts and industries of daily life. Agriculture, especially, has called to its aid the services of chemists, biologists and other scientific specialists. During the past half century a large and rapidly increasing amount of work in these lines has been done in the great European Universities, and over one hundred Agricultural Experiment Stations have been established in Germany and other European countries.

To the State of Connecticut belongs the honor of establishing the first Experiment Station in America. This, through the influence of Mr. Orange Judd, commenced its work, thirteen years ago, in the Chemical Laboratory in Orange Judd Hall and proved itself so successful that, two years later, the legislative appropriation was increased and made permanent. The State Experiment Station, thus placed upon a solid basis, is now an independent institution, with buildings and grounds of its own in the suburbs of the City of New Haven. The example of Connecticut was followed elsewhere until, after sixteen or more such institutions had been established in about as many States, the present U. S. Congress provided for the appropriation of \$15,000 per annum to each State and Territory, for the maintenance of Agricultural Experiment Stations. Of the fund for Connecticut, one-half is, by act of its last Legislature, entrusted to the Board of Control of the State Experiment Station, and one-half to the Board of Trustees of the Storrs Agricultural School, which is located at Mansfield. The latter

board, feeling the importance of the higher forms of experimental inquiry, for which the school had not all the needed facilities, and aware that such work was done at Wesleyan, invited Professor Atwater to assume the directorship of the station, at the same time asking if the chemical investigations could be conducted in the College Chemical Laboratory. In accordance with the wish of the college to promote research and to aid in whatever is useful to the community at large, the Board of Trustees willingly assented. Arrangements were accordingly made by which the more abstract investigation is done under the immediate supervision of the director in Middletown, while the agricultural and practical work is entrusted to the vice-director at Mansfield.

In accordance with these arrangements, studies in the Chemistry of Vegetable and Animal Life are going on in the Chemical Laboratory here. Mr. C. D. Woods of the class of 1880, formerly assistant in Chemistry in the college, and Mr. H. B. Gibson of Harvard, 1888, a graduate student, are, with suitable assistance, engaged in these investigations. Work in Bacteriology, with especial reference to milk, is being conducted in the Biological Laboratory by Professor Conn, who has an assistant for the purpose.

ALUMNI NOTES.

ADDRESSES OF ALUMNI, CATALOGUES AND OTHER PUBLICATIONS.—All alumni are earnestly urged to notify the President of the College of any change in their post-office address, as it is intended to keep at the college a Record of the Alumni corrected, as nearly as possible, up to date. Catalogues and BULLETINS will be forwarded to all alumni whose places of residence are known to the President. All friends of the College are requested to send to the President the address of any persons to whom catalogues should be sent. Copies of all books and other publications by our alumni are desired for the college library. And, in short, the college desires to have as much information as possible concerning its alumni.

WESLEYAN UNIVERSITY CLUBS.—The annual reunions of the Wesleyan University clubs in Boston, New York, Philadelphia, Washington, Wilkesbarre, Chicago, and Los Angeles, not only are most pleasant social occasions, but may be of much value to the college. They afford an excellent opportunity to bring to the knowledge of the alumni the actual condition of the college, and to secure their intelligent interest and coöperation in all plans for improving its work or extending its influence. News has already come to hand of preparations for meetings of most of the clubs during the next three months. Even in regions where alumni are so scattered that clubs cannot be regularly sustained, occasional meetings are gratifying to all concerned and advantageous to the college. Those in charge of the affairs at Middletown earnestly desire to maintain a cordial relation between the college and all its former students; the Acting President therefore welcomes correspondence regarding such gatherings. Arrangements will be made to have the college officially represented at them whenever practic-

able. As the BULLETINS come to the hands of most of the alumni, occasion is taken here to call attention to this, as one of the ways in which they may serve their *Alma Mater*.

SOME NEEDS OF WESLEYAN.

The College opens this year with more students and a stronger teaching force than ever before in its history. The increase of students, expansion of the curriculum, and increase of original research are marks of genuine growth; but with them come increased needs.

There will very shortly be urgent need of more and better accommodations for students. Every room in the dormitories is now full, as are the rooms for rent in private houses near the college. A new dormitory would afford to students some much needed modern conveniences of life, and the rents would make a moderate return for the investment.

We need at once a new building, with offices, lecture-rooms, and appliances for instruction by modern university methods, including seminary exercises. With the larger number of elective classes and the divisions required by the present number of students in the larger classes, the crowding in South College has become serious and is felt even in the newer buildings.

The call for increase of the library fund and for a gymnasium, which was expressed in the first BULLETIN of last year, should be repeated with emphasis. Along with their allotted work, the students do more and more collateral reading, and independent investigation is on the increase among both students and instructors. For all this books are essential. The deficiencies of the College Library are made up in small part by the private libraries of the instructors and by borrowing from other libraries; but the demand for enlargement of the College Library is most urgent. Health as well as recreation is dependent upon physical exercise. For this we greatly need a new, large, and well equipped gymnasium and an instructor in physical culture.

More laboratory accommodations are likewise called for. When Judd Hall was built it was considered ample for the departments of Natural History, Physics, and Chemistry. But the first of these departments has been divided into the two departments of Geology and Biology, the biological laboratory has been developed more fully, the collections in the museum have grown, as have the number and size of the elective classes and the amount of research, and the whole of Judd Hall will soon be required for these two departments. Meanwhile the class work and research of the chemical department have also grown, the laboratory is crowded, and at the present rate more room will soon be needed. The physical department, which was long ago moved to Observatory Hall, is likewise outgrowing its laboratory and other accommodations. A new building or buildings, with well equipped laboratories, will soon be indispensable for the proper carrying on of the work in physics and chemistry. And a new building for the astronomical observatory ought to be one of the acquirements of the near future. The college has indeed had excellent facilities for instruction in the

physical sciences,—very few in the whole country have had better,—but it is outgrowing them. It is because Wesleyan is abreast of the times that these needs come upon her.

Then, too, and for the same reasons, we greatly need graduate scholarships and fellowships, and more facilities for research. All these things are requisite for the healthiest and highest development of a school of the best grade.

And, finally, although the teaching force has been largely increased within the last few years, so that it has already outgrown its accommodations, a still further increase is demanded for the fullest development of the ideals of the University. The ideal toward which Wesleyan University is striving is expressed in the following passage from the report for 1888 to those conferences of the Methodist Episcopal Church which are officially represented in its Board of Trustees:

“We deem it no visionary faith which sees in the recent enlargement of our facilities the promise of such continued increase of our endowment in the near future as shall make it adequate to all the needs of the University. Nor in expressing this faith do we place a narrow limit to our needs. Methodism cannot afford to be content with anything less than a college equal in all respects to the best of which our country can boast. Especially is there a demand for the endowment of post-graduate fellowships, and for such an increase of our teaching force and our facilities for instruction as shall make it possible to offer extended and varied courses in non-professional post-graduate study. If we consider on the one hand our well equipped theological schools, and on the other hand our numerous seminaries affording excellent opportunities for secondary education, we shall see that perhaps the greatest present educational need of Methodism is that of an institution developed along the line of the so-called “philosophical” faculty of the German University,—that is, in the direction of extended opportunity for instruction, and no less for research, in the departments of philosophy, literature, and the sciences. We believe that the facilities and reputation already acquired by Wesleyan University make possible such development in the near future. Is it not the imperative duty of our patrons to see that this possible development is realized as speedily as may be?”

All this means pressing need of money. But it is as it should be: a college not poor would be a poor college.

—THE—

Wesleyan University Bulletin.

MIDDLETOWN, CONN.

NO. 4.—MAY 1, 1889.

THE present college year has well fulfilled the promise with which it opened, and draws toward its close with good omens for the year to come. Not only has the number of students in the college the past year been greater than ever before, but the instruction given has been greater in amount and has covered a wider field than at any previous period in the history of the college. A new President has been unanimously elected by the Trustees. The permanent vested funds of the college have been increased by over sixty thousand dollars paid into the treasury, in addition to which must be reckoned the gift of the late Dr. Nye—mentioned elsewhere, which is not yet available. At their recent meeting the Trustees made provision for a still further expansion of the course of instruction in two departments. All these things betoken a steady and healthy growth; and it may truly be said that there is reason to justify the sanguine expectations that the college will constantly enlarge its resources and extend the sphere of its usefulness.

TRUSTEE MEETINGS.

It is already well known that at an adjourned meeting of the Trustees, held by call of the President of the Board, in New York, Nov. 19, 1888, Rev. BRADFORD PAUL RAYMOND, Ph. D., D. D., President of Lawrence University, Appleton, Wisconsin, was elected to the presidency of Wesleyan University. A biographical sketch of Dr. Raymond will be found in another place.

The President's house has for the last few years been used as a dormitory for the women students. It is expected that it will now revert to its original purpose, and the Executive Committee was therefore instructed to look up a suitable building for a women's dormitory, and report to the Trustees at an adjourned meeting to be held at the call of the President of the Board in the month of March.

The second adjourned meeting was held March 25th, in New York.

The inauguration of President-elect Raymond was appointed for Commencement Day, and Hon. George Greenwood Reynolds, LL. D., Bowles Colgate, and Joseph E. King, D. D., were appointed a committee of arrangements therefor, to coöperate with a committee appointed by the Faculty.

In accordance with the recommendation of the Executive Committee, the Trustees ordered the purchase for a women's dormitory of the Bell property on High street, opposite the college campus. This comprises a lot with a frontage of 212 feet on High street, and a depth of 202 feet on William street, and a very large and well-built frame house, now occupied by the private school of the Misses Patten.

Prof. Atwater was granted leave of absence for a considerable portion of the next college year, to enable him to continue the work at Washington mentioned elsewhere in this BULLETIN.

The increased teaching force in the department of Mathematics, provided when Prof. Van Vleck was made Acting President, was by resolution continued.

Mr. L. O. Kuhns, for the past two years Librarian, was, in addition, appointed instructor in French, with the understanding that an Assistant Librarian should be secured to relieve him of much of the routine work in the Library.

Mr. Karl P. Harrington, '82, son of the late Professor Harrington, was appointed Tutor in Latin for the ensuing year. Mr. Harrington has taught Latin since his graduation in the High School at Westfield, Mass., and in Wesleyan Academy, Wilbraham, Mass., and during the last two years has been pursuing studies in Europe.

THE PRESIDENT-ELECT.

Rev. Bradford Paul Raymond, Ph. D., D. D., was elected President of Wesleyan University at a meeting of the Trustees held in New York city, 19th Nov., 1888.

President Raymond is a native of Connecticut, but has passed the greater part of his life in the West. He is a graduate of Lawrence University, Appleton, Wis., and of the School of Theology of Boston University. After completing his theological studies in Boston, he entered the N. E. Southern Conference and served one pastoral term in Providence, R. I. He then went abroad, and during the years 1880-81 studied in Leipsic and Göttingen. On his return he resumed the active work of the ministry, this time in the N. H. Conference, and was stationed at Nashua. From this pulpit he was called to the chair of President in Lawrence University, his Alma Mater, and that position he has held until the present time. His administration there has been successful in a very eminent degree: under his direction the material resources of the institution have been increased, its tone of scholarship raised, and its influence extended. As a preacher, Dr. Raymond is said to rank with the few ablest men of the denomination. In his chosen field of philosophical study, his attainments are wide and thorough, and he has in an eminent degree the gift to teach. The hearty loyalty and admiration of his students and all others who know him proves him to be a

man of generous sympathies, strong personality, and the faculty of leadership. He is in the prime of life—forty-three years of age,—and his energy, administrative ability, and scholarship, backed by the hearty support of the Trustees and all the friends of Wesleyan, ought to insure to the College rapid and healthy growth under his presidency.

RECENT GIFTS.

1. Daniel Ayres, M. D., LL. D., of Brooklyn, has recently given the sum of twenty-five thousand dollars towards the endowment of the Chair of Biology. Dr. Ayres has for more than twenty years given an annual prize to that member of the Freshman class who has passed the best examination upon the studies required for admission to the college. He has now paid to the Treasurer the sum of five hundred dollars for the permanent endowment of this prize.

2. Mr. William H. Hollis, of the class of '54, at his death some eight years ago, left a will bequeathing a portion of his estate, subject to certain life-interests, to Wesleyan University. In accordance with one of the provisions of the will, the College comes this year into possession of a part of this bequest, amounting to the sum of twenty thousand dollars.

3. E. B. Nye, M. D., of the class of '35, died in this city on the 7th of March last. By the terms of his will, a part of the income of his estate is to be paid annually to his two surviving children during their lifetime, and some other bequests are made from the income; but after the death of the children, the whole estate, with such accumulated income as may have remained after the payment of the above-mentioned bequests, is bequeathed to Wesleyan University.

4. The gifts of the Rev. J. W. Barnhart, class of '61, to the Museum and Library, and of the Phi Beta Kappa Society to the Library are mentioned below.

THE COMMENCEMENT ANNIVERSARIES

The programme of the Commencement season, so far as it is at present arranged, is given below. It is confidently expected that the number of alumni present during Commencement week this year will be unusually large. The quickened interest in the College which has recently been manifested among all its friends, and the formal inauguration of a new President, should bring back to Middletown not only those who are often here, but many who have only seldom revisited their Alma Mater.

It will be noticed that Commencement Day this year, and for the future, is to be Wednesday and not Thursday. This change will be generally acceptable. The Commencement period of four days has been somewhat over long and wearisome. Few visitors who came at its beginning remained until its close. Of

late there have been no exercises of much general interest assigned to Wednesday, and many have preferred not to wait till Thursday for Commencement Day. By the present arrangement the anniversaries are brought together into a shorter period, and it is believed that the attendance upon Commencement Day will be thereby largely increased.

It has been decided that the exercises attending the formal inauguration of President Raymond shall be held on Commencement Day, as it is thought that a much larger number of alumni will find it convenient to be present on that day than on any other. The regular Commencement programme will probably be shortened somewhat, and will be immediately followed by the Inaugural Exercises. A detailed order of the exercises cannot be given at this writing, but President Raymond's Inaugural Address will probably be delivered at about noon.

June 21. Friday. Prize Declamations by members of the Junior and Sophomore Classes.

June 23. Sunday.—Morning: Baccalureate Sermon, by Bishop Edward G. Andrews, D. D., LL. D.

Evening: University Sermon, by Rev. Ensign McChesney, Ph. D., of New York City.

June 24. Monday.—Afternoon: Class Day Exercises.

Evening: Glee Club Concert.

June 25. Tuesday.—Morning: Meeting of the Board of Trustees at 9 A. M. Business Meeting and Anniversary of the Alumni Association. Annual Meeting of the Phi Beta Kappa Association.

Afternoon: Reunion of the Classes of 1839, '64, '74, '79, '82, and '86. Receptions at the Chapter Houses of the various College Societies.

Evening: Quinquennial Exercises of the Alpha Delta Phi Fraternity; Orator, Rev. W. L. Phillips, M. A., of Brooklyn.

June 26. Wednesday.—COMMENCEMENT DAY. Formal Exercises of Commencement, beginning at 10 A. M., in the Methodist Episcopal Church, and followed by the INAUGURATION of Bradford Paul Raymond, President-elect. Commencement Dinner in the Memorial Chapel at about 2:30 P. M.

June 27, 28. Thursday and Friday.—Examination of candidates for admission.

DEPARTMENTAL NOTES.

MATHEMATICS AND ASTRONOMY.—At the recent meeting of the Trustees it was decided to continue the same amount of teaching force in this department for another year. This in reality increases the department by the addition of one instructor, since Prof. Van Vleck will be relieved of the duties of the presidency. With this increase in instruction, an expansion of the course is planned, the details of which will be given later.

The equatorial telescope has recently been fitted with apparatus for solar and lunar photography, made by Messrs. Alvan Clark & Sons, of Cambridge, Massachusetts, and with a polarizing solar eye-piece made by

Brashear of Allegheny, Pa. In connection with this photographing apparatus, and also for the use of the physical laboratory, a very convenient dark room has been fitted up in Observatory Hall.

GREEK.—During the present term the Junior elective class in Biblical Greek is reading "The Teaching of the Apostles," the interesting church manual of the first century, found at Constantinople in 1853.

MODERN LANGUAGES.—The recent appointment of Mr. Kuhns as instructor in French will make some changes in this department. Prof. Prentice will give the instruction in German, and announces for the Junior elective class for next year a course of twenty lectures upon the leaders of German literature, including Klopstock, Lessing, Herder, Schiller, and Goethe.

Prof. Prentice will also give a course in Hebrew.

In the elementary course in French, emphasis will be laid upon dictation and sight-reading. In the advanced course the work will consist of a critical study of the classical drama in class, with collateral readings to be prepared for examination outside the class. These collateral courses will cover several periods of French literature, and the student may make a selection therefrom. During the year lectures will be given on the history of the language and literature.

GEOLOGY.—A set of wooden crystallographic models has recently been purchased for class work in mineralogy. They were made by V. Fric of Prague.

CHEMISTRY.—In the last BULLETIN it was stated that during the thirteen years since the first Agricultural Experiment station in the United States was established, by authority of the State of Connecticut and with the aid of Mr. Orange Judd, in the chemical laboratory of Wesleyan University, this enterprise had extended to other States, and had lately been made national, by an act of Congress appropriating \$15,000 to each State for the purpose, in connection with the State universities and agricultural colleges. It was also stated that one-half of the appropriation for Connecticut was given to the Storrs School Agricultural Experiment Station, and that the chemical investigations for the Station were being conducted in the college laboratory under the direction of the Professor of Chemistry. Congress has provided for the coördination of the scientific work in the Stations of the several States under authority of the Secretary of Agriculture, who has organized an Office of Experiment Stations as a branch of the Department of Agriculture. At his request, Prof. Atwater has assumed charge of this enterprise, and has been engaged for the larger part of the fall and winter terms in Washington and among the Stations. During his absence the work of the chemical department has been in the charge of Mr. Clark.

HISTORY AND POLITICAL ECONOMY.—During the absence of Prof. Wilson in Baltimore the Junior and Senior classes have taken a course in collateral reading. The Senior history class has read Bryce's *American Commonwealth*. The Junior history class has read Symond's *Age of the Despots* and Stevens' *Lectures on the History of France*. The Junior class in Constitution has read the *Federalist* and Wilson's *Congressional Government*.

BIOLOGY.—Dr. Daniel Ayres, of the class of 1842, has recently placed in the hands of the Trustees \$25,000, which is to go toward the endowment of the professorship of Biology.

During the year, in addition to the regular work of the department, a considerable amount of special investigation has been carried on in the subject of Bacteriology. The work has been performed, under the direction of Prof. Conn, by some advanced students and by a private assistant provided by the Experiment Station. The subjects that have been studied have been, The Relation of Bacteria to Milk, Cream, and Butter, and, Middletown Drinking Water.

Rev. J. H. Barnhart has presented to the Museum a beautiful and valuable collection of rare corals.

LATIN.—Prof. Merrill has conducted a series of conferences on Aims and Methods in the Teaching of Elementary Latin, designed especially for prospective teachers, but open on application to all persons interested in the subject. The purpose of these conferences is to aid in determining the proper scope, arrangement, and conduct of a preparatory course in Latin, and thus in creating a greater unity between the work of the preparatory school and that of the college.

LIBRARY.—At the last Commencement, the Phi Beta Kappa Society voted to present to the library a sum of money to be expended for the purchase of some set of books, or for books in some special department. The committee who have had the matter in charge have decided to purchase the Dictionary of National Biography, by Leslie Stephen. The set is to comprise fifty volumes, of which eighteen have already appeared.

Rev. J. H. Barnhart has presented twenty volumes of the *Revue des Deux Mondes*, completing the set in the library.

LECTURES BY THE FACULTY OUTSIDE THE COLLEGE.

Prof. Van Benschoten has given a lecture on Greek Art before the New Britain Art Club.

Prof. Atwater presented the following papers before the American Association for the Advancement of Science: The Nitrogen Factor of Protein, and, An Error in our National Dietary.

Prof. Winchester has given lectures at Wells College, Elmira College, and Wellesley College; also, in New London, Norwich, Northampton, Hartford, Philadelphia, and other cities. He has also lectured before the Phi Beta Kappa Society at Yale.

Prof. Wilson has given a course of twenty-five lectures before a class of graduate students at Johns Hopkins University. This course was upon Local Government, and is one of a series of three courses given in successive years upon the general subject of Administration. He has given two lectures upon City Government before the Brown University Historic and Economic Association. Prof. Wilson also delivered the formal Address in connection with the public exercises held in the First Congregational Church of this city, on the occasion of the recent Centennial of Washington's Inauguration.

Prof. Conn has given a course of thirty lectures on Zoölogy at Trinity College, and a shorter course in Biology. He has given a lecture at Willimantic on "How Animals Move," and has read a paper before the Boston Society of Natural History upon Insect Larvae.

PUBLICATIONS.

Prof. Rice, on Science Teaching in the Public Schools, published in the *American Naturalist*.

Prof. Atwater, as Director of the Starrs Experiment Station, has published several Bulletins which embody the work done under his direction. The special chemical work was done by C. D. Woods.

Prof. Winchester, an article on Byron in the *Middleton Review*.

Prof. Wilson, An Old Master (Adam Smith), in the *New England Review*. A Review of Bryce's American Commonwealth, in the *Political Science Quarterly*.

Prof. Conn, Insect Larvae and their Relation to Adults, in the Proceedings of the Boston Society of Natural History.

SPECIAL SERMONS.

Prof. Rice is on the list of clergymen who are to preach at Cornell and at Wellesley College. He is also to give the Baccalaureate Sermon at Lasell Seminary, Auburndale, Mass.

LECTURES BEFORE THE COLLEGE.

The following public lectures have been delivered before the College during the year:—

Dec. 17th.—John Fiske. Subject, The Roman and the English Idea of Government.

Jan. 10th.—Prof. Arthur T. Hadley, of Yale College. Subject, Problems of Railroad Legislation.

Jan. 14th.—Bishop J. F. Hurst. Subject, The Reverses of History.

Feb. 5th.—Prof. Wm. M. Stanley, of Princeton University. Subject, The Unconscious Writing of History.

March 26th.—Dr. Nicholas Murray Butler, President of the Industrial Training School for Teachers of New York. Subject, The Progress of Public Education.

April 25th.—Major J. W. Powell, of the U. S. Geological Survey. Subject, Human Evolution.

The last lecturer in the course is expected to be Hon. J. K. Hawley, U. S. Senator from Connecticut.

The following papers have been read before the Middletown Scientific Association:

The Geology of the White Mountains. Prof. Rice.

The Fossiliferous Shales of Durham. S. W. Loper.

Some Experiments in Relation to the Source of Nitrogen in Plants. C. D. Woods.

Bacteria in Drinking Water. W. B. Eaton.

Science Teaching in the Schools. Prof. Rice.

On the Atomic Weight of Oxygen. H. B. Gibson.

On the Evolution of the Placenta of Mammals. Prof. Rice.

Germ Diseases: their Sources and Modes of Infection. Prof. Conn.

JUNIOR EXHIBITION.

The Junior Exhibition for the current year was held in Memorial Chapel Tuesday, April 2d.

The committee of award were A. B. Morrill, Professor of Physics in the State Normal School, New Britain; Rev. C. W. Holden, pastor of the M. E. Church, Willimantic, and W. F. Gordy, principal of the High Street Grammar School, Hartford.

The Romig prize was awarded to Eugene Allen Noble, of Brooklyn, N. Y., and the Reed prize to Wendell Phillips Parker, of North Gorham, Me.

Mr. Noble's subject was "The American Constitution," and Mr. Parker's, "Parnell and Home Rule."

DAY OF PRAYER.

The Day of Prayer for Colleges was celebrated, as usual, on the last Thursday in January. In the morning a full audience of students, townspeople, and visitors from other places listened to an earnest sermon by Rev. A. H. Tuttle, '66, of Wilkesbarre, Pa. Prayer-meetings were held by the individual classes during the day, and in the evening a general prayer and conference meeting was conducted in the Chapel. The tone of feeling throughout all these meetings was true and deep, and their later influence most thoroughly beneficial to the religious spirit of the College.

RECENT CHANGES IN COLLEGE RULES.

COMMENCEMENT APPOINTMENTS.

Since 1873, Commencement appointments have been based upon the work in composition and declamation, appointments being given to the ten students having the highest marks in rhetorical exercises during the last three years of the course. Hereafter, in the award of the Commencement appointments, only the marks given after the beginning of the Junior year are to be counted. It is believed that this change will be beneficial, in giving increased incentive to improvement in writing and speaking during the later years of the course. The appointments at Junior Exhibition will continue to be given on the basis of the marks in rhetorical exercises for the Sophomore year and one term of the Junior year.

MARKING SYSTEM.

The present system of Honors and Prizes requires for its just administration a somewhat detailed system of marks, in order that the work in different departments may be coördinated, and superiority in general scholarship may be recognized. Hitherto, for a number of years, it has been customary to give each student early in each term a detailed statement of his marks in studies completed since the last previous report. While it is considered desirable that each student should receive frequent reports from his instructors in regard to their estimate of his work, it has come to be believed that the reporting of marks in detail each term unduly emphasizes the competitive feature of the system, and tends to create an unwholesome degree of ambition for superiority on the merit-roll. It has been accordingly decided not to report to each student his exact numerical standing, but to report only his position in one or another of five grades in each study. These grades are based on certain absolute standings, and are accordingly not competitive. The first and second grades have respectively a minimum standing of 88 and 83 per cent.—the standings required respectively for first and second honors,—while the highest mark given in any department is still about 92 per cent. of the absolute maximum. The third and fourth grades have respectively a minimum standing of 75 and 60 per cent. The fifth grade includes those who fall below 60 per cent, and who pass in a study (if at all) only *speciali gratia*.

SPECIAL HONORS.

Perhaps the most important of the recent changes of regulations are the changes in regard to special honors. It has been the theory of the Faculty that a special honor ought to be awarded only to a student who has shown a marked interest in a study, devoted himself especially to it during a considerable part of the course, and attained exceptional proficiency in it. Practically, in the working of the scheme, great inequalities have developed in different departments. In some departments the number of elective courses which have entered into the requirement for a special honor has been so small as not to involve any considerable specialization on the part of the student. It has been sometimes possible to take a special honor in one department as a merely incidental matter, while the attention of the student was mainly given to a very different department. It is believed also that the standard required in the regular work of the department has been too low; and that the extra work required for the honor was too often looked upon simply as another study to be passed in by itself, without any comprehensive thought of the department of study as a unit. The disposition to postpone a large part of the extra work required till the Senior vacation, and then to get through it in a perfunctory manner, has become a serious evil.

It is believed that the new regulations will in great degree obviate these difficulties, and greatly raise the standard for the special honors. The important changes are as follows:—

1. A larger list of electives in the department in question and in closely allied departments is required to be chosen by the candidate for a special honor.

His whole course for the last two years must have a distinctly specialized character.

2. In the class-work of the department, a standing of 83 per cent. in the last three years, or 88 per cent. in the last two years, of the course is required.

3. Whatever other tests may be imposed in each case, one requirement for a special honor is to be an oral examination before a committee of the Faculty on all the work of the department. In this examination there will be demanded of the student a comprehensive and philosophical grasp of the department of study in its unity.

4. All work for special honors must be completed not later than the second Saturday before Commencement.

EXAMINATIONS.

Previously to the present year examinations have been held, at the discretion of the respective instructors, whenever any particular study or definite part of a study was completed. While there were undeniable advantages in this arrangement, a very serious disadvantage was found in the fact that written examinations in various studies were occurring in almost every week from November to April, occasioning considerable interference with the regular courses of recitations and lectures. By this new arrangement all examinations are to be held either at the end of one of the terms, or in one specified week in February in which all recitations and lectures are to be omitted.

THE WESLEYAN HOUSE OF COMMONS.

Early in the winter term a students' House of Commons was organized upon the model of societies already existing at the Johns Hopkins University, in the Columbia Law School, and elsewhere. It was felt by the students and by those who were interested in assisting them in this scheme that the College would be much better off for a society in which all the men alike could meet and compare talents for public speech and for public business upon an equal footing; in which an organic college feeling could be generated and kept at a proper glow; and in which every one who chose could, under the most stimulating conditions, perfect himself in debate and in parliamentary practice.

It was thought best to take the English House of Commons rather than our own House of Representatives as a model of organization, because it would be necessary in order to reproduce the organization and methods of the House of Representatives to have a complete set of standing committees, to commit all measures to them for consideration, and so to divide among sections of its members the debating function which it was desired the whole House should exercise. The organization of the House of Commons, moreover, offered a dramatic and personal element not to be found in our own House of Representatives. The presence and responsibility of a ministry, as has been proved by the experience in Baltimore and New York, stimulates interest in parliamentary tactics and debate as no other way of conducting business could be expected to do.

According to the plan adopted, the "House" discusses modern political questions and questions affecting college matters. Every question comes up in the form of a bill and goes through the regular parliamentary stages of legislation. It is the duty of the ministers, and the privilege of any member, to introduce bills, and the ministers are responsible to the House for their opinions upon every question of importance introduced: that is, like their English prototypes, they must resign if defeated. The Speaker of the House takes the place of the Crown in the appointment of ministers. Upon the resignation of a cabinet, he appoints the leader of the opposition Prime Minister, and the Prime Minister appoints his colleagues, selecting them, of course, from his own side of the House. The ministry consists of three members only (though there is already some agitation for the addition of a fourth), namely, a Prime Minister, a Secretary for Foreign Affairs, and a Home Secretary.

So far, the interest in the House has been very great, not only among the students, but among the townspeople as well. It has manifest advantages over the old-style literary society, in which men were arbitrarily appointed to the side of the question which they were to advocate, and in which they were stimulated, not by ambition to support their views, but by fines; and the success of similar societies in other colleges, after a trial of several years, gives a very reasonable ground for confidence that Wesleyan will be equally persistent and enthusiastic in her activity in this kind of work.

THE M. A. DEGREE.

As announced in the last BULLETIN, it was hoped that the regulations governing the conferring of the degree of Master of Arts in 1892 and thereafter would be ready for publication at this time, but owing to a pressure of college business the recommendations of the Faculty will not be laid before the Trustees until their annual meeting in Commencement week. Notice of action then taken will be published in the Commencement number of the *Wesleyan Argus*.

WESLEYAN UNIVERSITY CLUBS.

Annual meetings of the Wesleyan University Clubs have been held during the past few months as follows:

The New York Club met at Clark's, Dec. 14th. The college faculty was represented by Profs. Van Vleck, Rice, and Merrill, and the undergraduates by Mr. Geo. W. M. Glenn of the Senior class. The following officers were elected for the ensuing year: President, Stephen Henry Olin; Vice-Presidents, George P. Mains and Wm. C. Wallace; Secretary, Geo. D. Beattys; Treasurer, Wilbur F. Randall. The toastmaster was Wm. C. Wallace.

About seventy alumni attended the meeting of the Boston Club at the Revere House, Dec. 10th. Profs. Van Vleck, Prentice, and Merrill, and Mr. Van Vleck were present from the faculty, and the undergraduates sent as their representative Mr. F. M. Davenport of the Senior class. David H. Ela served as

toast-master, and officers for the ensuing year were elected as follows: President, Frederic Woods; Vice-Presidents, George D. Sargent and Emory L. Haynes; Secretary, Wilbur E. Rowell; Treasurer, Edward H. Mansfield.

The meeting of the Chicago alumni, held at the University Club, Jan. 18th, was marked by the presence of an ex-President of Wesleyan, Dr. Cummings, the Acting President, Prof. Van Vleck, and the President-elect, Dr. Raymond. The officers of the association elected at that time are: President, Herbert F. Fisk; Vice-Presidents, Amherst W. Kellogg and James M. Hawxhurst; Secretary, Lorenzo N. Johnson; Treasurer, Ernest Hitchcock.

Another has been added this year to the family of local organizations of Wesleyan alumni. The Wesleyan University Alumni Association of Northeastern Pennsylvania held its first meeting in Wilkesbarre, Jan. 4th. A permanent organization was effected as follows: President, Hubbard B. Payne; Secretary, Wesley E. Woodruff; Treasurer, Geo. W. James. From the college were present as representatives, Prof. Van Benschoten and Mr. S. G. Landon of the Senior class.

The annual meeting of the Wesleyan University Alumni Association of Southern California is to be held in Los Angeles, May 25th. The present officers of the Association are: President, Hon. Cornelius Cole, '47; Vice-President, Prof. C. M. Parker, '68; Secretary and Treasurer, E. P. Clarke, '85. The Association is enjoying most vigorous life, and has already eighteen members.

THE RELATION OF THE COLLEGE GRADUATE TO THE PROFESSIONS.

In these days of special education and universal hurry, young men are apt to think that a college education is an unnecessary luxury. The natural desire to enter into active life frequently proves too strong to admit of four years of general training in preparation for the special education in any of the professions. Newspapers contain not a few slurs concerning the adaptability of college men to active life. It is not uncommon to find men of repute and experience who advise young men intending to pursue a professional life not to go to college. Quite recently a physician of reputation, himself not a college graduate, published in a paper of wide circulation an address urging young men who intend the study of medicine not to think of a college education. Similar advice is occasionally heard in regard to the other professions. It is, therefore, a matter of vital interest to young men deciding upon their future education to know the position that the college graduate does take among professional men after entrance into active life.

In the following statistics the attempt is made to show whether a college education is really a factor in determining success in professional life. To state the number of college men who go into the various professions, as is usually done in college statistics, tells us nothing in regard to the point we are considering.

If, however, it is possible to find out what men make a marked success in the various educational callings, and to determine the proportion of college graduates in this number, we shall then have some indication of the bearing of college life on success in the professions. Success is, to be sure, not easy to measure, and different criteria must be used in different cases; but the following figures will be found suggestive.

In the first place, it must be noticed that the college students form only a small proportion of the citizens of the country,—only about one-half of one per cent. of the male population receiving a college education. Any of the professions is equally open to the other ninety-nine and one-half per cent. Let us notice how large a proportion of the successful men this one-half of one per cent. has furnished to the professions. In political life, to begin with, it is fair to assume that the few men sent to Congress will generally be regarded as successful. Now, in the history of this country about one-third of the congressmen have been educated in our colleges. More exactly: in the last two Congresses, the fiftieth and fifty-first, about forty per cent. both of senators and representatives have been college men. Some few of this number were not graduated.

In the professions of law, medicine, and the ministry, it is not easy to obtain a criterion of success that can be used. We may roughly assume, however, that those who make a wide reputation in their calling may be regarded as successful. Appleton's *Cyclopædia of American Biography* gives an account of all Americans who have made any special reputation in the various callings of life, and it may fairly be assumed that those who have made a sufficient reputation to have their life recorded in this work may be regarded as successful. Such a criterion is, of course, a rough one, for the personal knowledge of the editors has its influence upon the record; but, taken as a whole, there can be no doubt that those who have made reputation enough to obtain a record in this work are more successful than those who have not thus obtained record. In our estimates made upon this basis we have confined our attention to those who belong to this century, for in the early history of the country the higher educational institutions were too few to make a comparison with the present a just one. We have also confined the figures to the inhabitants of the United States.

With this as a criterion of success, we find that of those who have made a reputation sufficient to obtain notice in the *Cyclopædia of American Biography*—

Among surgeons,	-	-	-	-	-	49	per cent.	have been college men.
Among physicians,	-	-	-	-	-	60	"	"
Among those who have made a reputation in the law, either as lawyers or states- men,	-	-	-	-	-	60	"	"
Among clergymen	-	-	-	-	-	80	"	"

In the above list of lawyers we have tried to exclude those who have made a reputation simply by holding political office, and to include only those who have made their reputation as lawyers or jurists or statesmen.

In regard to the significance of these figures we should notice the following points: Congressional honors are open to the aspirations of every citizen, and there are, moreover, many parts of the country in which very few college men

can be found. In other parts of the country the population is made up chiefly of foreigners, and quite a number of representatives are sent to Congress by the illiterate voters of New York and Chicago. Such representatives will quite naturally not be college men. If these were left out of account, the per cent. of college men in Congress would be much larger. Again: a large proportion of the medical profession are either graduates of the medical schools, without any college education, or have entered the profession directly from the office of some doctor. Among surgeons there are not a few who gained their professional knowledge almost solely by experience in the army during the late war. In the law there is a still larger proportion who have been admitted to the bar without college education, either from law schools or directly from study in the office of some lawyer. Although no exact figures can be given, there is no doubt that a very large majority of lawyers are not college graduates. The ministerial profession is also open to every one, and in the past,—as is the case at present in some denominations,—the large majority of clergymen were not college men. When these facts are kept in mind, it is very significant to find that, among the men who have achieved professional reputation in this country, forty per cent. of congressmen, fifty per cent. of surgeons, sixty per cent. of physicians, sixty per cent. of lawyers, and eighty per cent. of clergymen are college graduates.

In the profession of teaching, the college graduate is fast acquiring a control of the higher positions. The principals and nearly all of the male assistants in our high schools and academies are college graduates. It will not be long before the same can be said of the female assistants. It is only in exceptional cases that a man who is not a college graduate is considered by school boards as a candidate for any of these positions. In institutions of a higher grade, in colleges and technical schools, it is rarely that a person without a college education attains prominence enough to hold a professorship. In schools lower than the high schools, the proportion of college graduates is fast increasing. In the profession of teaching, therefore, a college education is fast becoming an absolute necessity.

Wesleyan is one of the younger colleges, and has not had time to make a record through her alumni comparable with that of the older colleges; but she has a fair share among the men above recorded as successful. Perhaps the body of men in which we may most readily reach an estimate of the success of Wesleyan alumni is the New York East Conference. While to-day more of our graduates enter the other professions than previously in the history of the College, there still are, as there always have been, many Wesleyan men in the Methodist ministry. Of the New York East Conference, Wesleyan men form about one-third. The appointments held by this number will give an indication of the rank that they take in the conference. The importance of these appointments is not, indeed, a very good criterion: for we recognize that some men who hold the smaller appointments are doing as valuable and successful work as others who hold the larger positions. Still, the size of the appointment will in general indicate the importance of the work done. Dividing the appointments into classes according to the salary paid the pastor, we find that the Wesleyan men are distributed as follows:

Of pastors who receive less than \$1,000, - - -	5	per cent. are Wesleyan men.
Of pastors who receive between \$1,000 and \$2,000, - - -	15	" "
Of pastors who receive more than \$2,000, - - -	50	" "

The reason for the somewhat large proportion of Wesleyan men in the smaller appointments is itself significant. Most of the smaller appointments are held by young men, and an increasing proportion of the younger men are college educated. In the Eastern conferences of the Methodist Episcopal Church, as already in other denominations, a college or theological education is becoming more and more necessary for admission. Each decade sees the proportion of those admitted to the conference without such education decrease. This being true, the fact that there is a larger number of college men in the smaller appointments than in those of a higher grade is not surprising; while the large proportion of Wesleyan men in the best appointments of the conference is an indication that a college education has not unfitted them for the ministry, but has, on the other hand, fitted them for the best success.

In the light of these facts, the newspaper impression that the college graduate is not fitted for active work is certainly unfounded. It is true, indeed, that self-educated men have succeeded and many college graduates have failed in their professions; but these facts only prove that a college education will not make ability. If a man has the force to overcome obstacles and make himself independent of educational advantages, he is sure to succeed. Such a man will succeed under any circumstances, and probably better with a college education than without it. But there are thousands of men with the ability to make for themselves a reputation, who lack the self-confidence and determination to surmount the obstacles resulting from lack of educational opportunities. The existence of such a large proportion of college men among those who have made a reputation in the various professions certainly proves that for the majority of men who are not men of genius, but simply thorough, earnest students, the chance of success is made much greater by a college education.

—THE—
Wesleyan University Bulletin.

MIDDLETOWN, CONN.

OCTOBER 15TH, 1889.—No. 5.

THE college year opens with all good omens. The new President takes his place with a hearty welcome, assured of a loyal support from the whole college community and from the whole body of alumni. The number of students in attendance is larger than ever before in the history of the college. The Registrar's lists show 231 names: this is an increase of 13 over last year. The faculty at present numbers twenty-three, all of whom, except four, are officers of instruction in charge of classes. It is believed that recent changes and additions have made the course of study at once more broad and more thorough than ever before, and that the intellectual life of the college was never more healthy and vigorous. And the hopeful beginning which the gymnasium committee have made upon their work—referred to elsewhere—is only one indication out of many that might be cited of a generous and enthusiastic interest in the college, shared alike by students and by alumni. The wants of the college, of course, increase with its growth: but the hopeful and generous temper of its friends makes it certain that these wants will be promptly met.

NOTES OF THE LAST COMMENCEMENT.

TRUSTEE MEETING.—The inauguration of President-elect Raymond attracted to their annual meeting, on Tuesday of Commencement week, an unusually large number of Trustees. Their deliberations were marked by great enthusiasm and liberality. A summary of their more important actions is herewith given.

Resolutions were passed expressing high appreciation of the faithful and successful administration of Professor Van Vleck during his last two years of service.

as Acting-President, and thanking Dr. Daniel Ayres for his recent generous gifts of \$500 to endow the Ayres Prize and of \$25,000 toward the endowment of the chair of Biology.

The annual subscription of \$250 to the expenses of the American School at Athens was continued.

The Executive Committee was directed to employ a competent architect to prepare plans and estimates for the construction of a commodious exit from the upper chapel, and to report at the next meeting.

A resolution was passed approving the adoption of a plan for allowing alumni to vote *in absentia* on the election of "Alumni Trustees," and a committee was appointed to draw up a detailed scheme and to report at the next annual meeting of the Board.

A committee was appointed to prepare a detailed statement of the investments of the University funds, and to report at the next annual meeting.

The following were elected Trustees for the term ending in June, 1895: C. C. North, M. A., Rev. S. F. Upham, D. D., Rev. Wm. Rice, D. D., Rev. Bishop C. D. Foss, D. D., LL. D., Charles Scott, and J. D. Slayback (*vice* Robert Seney, resigned). J. E. Andrus was elected to serve out the unexpired term of J. N. Camp, resigned.

The proposed regulations concerning the Master's degree in Arts and in Science were adopted in the form as they appear elsewhere in this BULLETIN.

Walter P. Bradley was elected Instructor in Chemistry, L. Oscar Kuhns, Instructor in French, and John L. Bridge, Assistant in Chemistry for the ensuing year. The other instructors, tutors, and assistants were continued.

The committee appointed to consider the advisability of changing the name of the University was continued.

The employment by the Executive Committee of assistants in the departments of Physics and English Literature was authorized.

The consideration of a plan for heating all the college buildings by a uniform system was referred to the Executive Committee with instructions to report at the next meeting.

It appeared that the estimated running expenses for the next year exceeded the probable income of the University by about \$10,000, and about one-half of this sum was immediately subscribed by Trustees that were present.

The Board adjourned to meet in New York city, at the call of the President, on some day in December. It is understood that this day will probably be that appointed for the annual meeting and dinner of the New York Wesleyan University Club.

DEGREES OF M. A. AND M. S.—The following is the text of the regulations concerning the Master's degree in Arts and in Science as adopted by the Trustees at their annual meeting in June last. It will be noted that the degree of Master of Science has not heretofore been conferred by this University:

"SECTION 1. The degree of M. A. may be conferred upon B. A.'s of Wesleyan University of at least one year's standing at the satisfactory conclusion of a course of advanced, non-professional study, pursued in residence for the period of not less than one year. Said course of study shall be under the direction of a Committee of the Faculty on Graduate Instruction, to be composed of three permanent members with the addition of the instructor in charge of each department in which the candidate shall pursue work. Evidence of the candidate's proficiency in the approved studies shall be given by an examination, oral or written, by a thesis or essay, by the exhibition of scientific specimens, preparations, or processes, or by two or more of these methods combined, as the Committee may prescribe. All such tests of proficiency shall be under the direction of the Committee, and they shall report to the Faculty proper candidates for the degree.

"SEC. 2. In the case of B. A.'s of other colleges whose course of study is accepted as sufficient by the Committee established by Sec. 1, or who shall pass such additional examinations as the Committee may prescribe, the degree of M. A. may be conferred on the conditions prescribed in Sec. 1 in the case of B. A.'s of Wesleyan University.

"SEC. 3. The degree of M. A. may also be conferred upon B. A.'s of Wesleyan University of at least three years' standing at the satisfactory conclusion of a course of advanced, non-professional study pursued *in absentia*, and equivalent in amount to that prescribed under the provisions of Sec. 1 in the case of resident graduate students; and in all other particulars the same regulations shall hold in the case of non-resident as in the case of resident students. The degree may also be conferred upon B. A.'s of Wesleyan University of two years' standing at the satisfactory conclusion of a course of study pursued *in absentia*, on the conditions above specified, provided that the candidate shall have spent the two years in resident study in a non-professional department of some other university.

"SEC. 4. The degree of Master of Science may be conferred upon Bachelors of Philosophy and Bachelors of Science, whether of this or of other colleges, under the same conditions that govern in the case of the Master's degree in Arts.

"SEC. 5. A fee of ten dollars shall be required from each graduate student upon promotion to the Master's degree, which amount shall be paid to the Treasurer."

In accordance with Sec. 1 of the above regulations, the Faculty have appointed Professors Rice, Wilson, and Merrill permanent members of the Committee on Graduate Instruction, and to them, or to the head of any one of the departments of instruction, may be addressed communications from prospective graduate students.

ALUMNI ASSOCIATION.—The Alumni Association held its annual meeting on Tuesday morning of Commencement week. Hon. Watson C. Spiller ('54) had

S. H. Olin, '66, whose terms of service had expired, were reelected alumni trustees.

On motion of J. B. Scott, '81, it was voted that a committee of five be appointed to take in hand the matter of securing subscriptions for a new gymnasium. The following gentlemen were appointed to this committee: Hon. George G. Reynolds, LL. D., '41, Rev. J. M. King, D. D., '62, S. H. Olin, '66, A. C. Bruner, '79, J. B. Scott, '81.

The committee appointed to secure such a change in the charter of the University as will allow absent members of the association to vote for Trustees, reported by their chairman, Hon. D. B. Lockwood, '49, that nothing had been done in the matter. Hon. W. T. Elmer, '57, Prof. W. N. Rice, Ph. D., LL. D., '65, and Rev. J. Pullman, D. D., '63, were appointed a committee to carry on the matter, and were instructed to confer with the Trustees to secure their co-operation.

The following is the list of officers chosen for the present year:

W. T. Elmer, '57,	-	-	-	-	-	-	-	<i>President.</i>
W. D. Leonard, '78,	-	-	-	-	-	-	-	<i>1st Vice-President.</i>
G. H. McGrew, '70,	-	-	-	-	-	-	-	<i>2d Vice-President.</i>
F. K. Hallock, '82,	-	-	-	-	-	-	-	<i>3d Vice-President.</i>
W. N. Rice, '65,	-	-	-	-	-	-	-	<i>Recording Secretary.</i>
M. B. Crawford, '74,	-	-	-	-	-	-	-	<i>Corresponding Secretary.</i>
F. M. North, '72,	-	-	-	-	-	-	-	<i>Treasurer.</i>
E. T. Merrill, '81,	-	-	-	-	-	-	-	<i>Memorialist.</i>

EXECUTIVE COMMITTEE.

D. W. Northrop, '68,	J. S. Camp, '78,
W. U. Pearne, '74,	C. E. Bacon, '78,
M. E. Culver, '75.	

DEGREES AND HONORS.—Degrees and Honors were conferred last Commencement upon the members of the graduating class as follows:

The degree of B. A. was conferred on Dudley Chase Abbott, Edward Everett Abercrombie, Arthur Newell Burke, Seward Vincent Coffin, Thomas Roy Crooks, Fred Morgan Davenport, Bernard Marcus Davis, Julius Wilbur Eggleston, Henry Floy, Willie Irving Ford, George Washington Gardiner, Jr., Mark Willson Gill, Herbert Augustus Hill, George Mead Hughes, Samuel Gail Landon, Seymour Landon, John Elijah Loveland, Henry Frank Mandeville, Edward Ernest Matthews, Arthur Herbert Meritt, Harry Summerfield Noe, Arthur W. Partch, William Claflin Prentice, Frank Rollins, William Emory Smyser, Jared Sweet Tillinghast, Everett Hustis Travis.

The degree of Ph. B. was conferred on Henry Havens Chatfield, William Bradford Eaton, Frederick Beauregard Faber, George Meek Glenn, Orville

Edson Johnson, Percy Lincoln Johnson, George Frederic Kettell, George Elbert Manchester, Charles Perley Tinker, Willard Ives Warriner, Elizabeth Arbuckle Craig, Mary Graham.

The degree of B. S. was conferred on William Lawrence Clarke, Rowland Miles, Alfred Northam Wright.

The following members of the class were graduated with honors of the first grade in general scholarship, indicating that their general standing for the whole course was 88 per cent. or more of the maximum: Fred Morgan Davenport, Mary Graham.

The following members received honors of the second grade, indicating that their standing for the course was 83 per cent. or over: Dudley Chase Abbott, Edward Everett Abercrombie, Arthur Newell Burke, Henry Havens Chatfield, Bernard Marcus Davis, Willie Irving Ford, Herbert Augustus Hill, Samuel Gail Landon, Harry Summerfield Noe, Arthur W. Partch, William Emory Smyser.

In special departments, honors were conferred as follows:

In Modern Languages.—Henry Havens Chatfield.

In English Literature.—Thomas Roy Crooks, Mary Graham, Arthur W. Partch.

In Philosophy.—Mary Graham, George Frederic Kettell.

In Biology.—William Bradford Eaton, Orville Edson Johnson.

The Rich Prize for the best oration at Commencement was awarded to Fred Morgan Davenport.

Honorary degrees were conferred as follows:

The degree of M. A. on Rev. Orange Scott.

The degree of D. D. on Rev. F. D. Blakeslee Principal of the East Greenwich Academy, East Greenwich, R. I.; Rev. George D. Mains, of Brooklyn, N. Y.; Rev. Ensign McChesney, of New York City; Rev. Watson I. Phillips, of Wilkesbarre, Pa.

The degree of LL. D. on Rev. William W. Smith, President of Randolph-Macon College.

INAUGURATION OF PRESIDENT RAYMOND.—The formal exercises of inauguration were held on the afternoon of Commencement Day. The close of the Commencement exercises was followed by a half-hour's intermission, after which the audience re-assembled in the Methodist Church, the members of the college, alumni, and invited guests occupying the body of the house. The exercises were opened with the singing of the long metre doxology by the whole audience, led by a chorus of students. Prayer was offered by Rev. Bishop C. D. Foss, D. D., LL. D. Luther's hymn, "Ein' Feste Burg," was sung and then followed brief addresses of reception and welcome to the new President by

behalf of the Trustees, alumni, students, and Faculty. Hon. George G. Reynolds, LL. D., spoke for the Trustees; Rev. J. M. King, D. D., for the alumni; the students were represented by Mr. Richard E. Bell of the class of '90, and Acting President John M. Van Vleck welcomed the new President in behalf of the Faculty, and formally turned over to him the keys of the University.

President Raymond's Inaugural Address, which followed the singing of Faber's noble hymn,

"Faith of our fathers, living still,"

was a careful discussion of the philosophy of education. There is no space here for an extended report of it, and a meagre summary would do it injustice. It was printed in *Zion's Herald* under date of July 17, 1889. At the close of the address, the audience joined in singing Watts' version of Psalm xc.:

"O God, our help in ages past,"

and the exercises were closed with the benediction, pronounced by ex-President McCosh of Princeton.

In spite of the heat of the summer day and the inevitable weariness attendant upon putting so long a programme immediately after the Commencement speaking, the exercises held to the end the interest and close attention of the large audience, and left with every one who was present a feeling of assurance for the success of the new administration.

FINANCIAL EXHIBIT.—The financial condition of the College may be indicated by the following abstract of the annual exhibit of the Treasurer:

PROPERTY OF THE UNIVERSITY.

Old College Buildings and Lands,	-	-	-	-	-	-	\$155,000 00
Observatory Hall,	-	-	-	-	-	-	15,000 00
Gymnasium Building,	-	-	-	-	-	-	5,000 00
Rich Hall,	-	-	-	-	-	-	45,000 00
Memorial Chapel,	-	-	-	-	-	-	75,000 00
Orange Judd Hall,	-	-	-	-	-	-	105,000 00
Scientific Instruments and Apparatus,	-	-	-	-	-	-	27,550 00
Natural History Museum,	-	-	-	-	-	-	33,480 00
Library,	-	-	-	-	-	-	45,000 00
Organ, Furniture, and other Fixtures,	-	-	-	-	-	-	3,600 00
Invested Endowment Funds, exclusive of the Seney Scholarships,							698,556 45
Seney Scholarship Fund,	-	-	-	-	-	-	100,000 00

\$1,308,186 45

The income and expenditures for the college year 1887-88 were as follows:

INCOME.

From rents and invested funds, - - - - -	\$30,767 30
From students' bills, - - - - -	12,431 04
From other sources, - - - - -	1,438 91
Total Receipts for the year, - - - - -	\$50,935 34

EXPENDITURES.

Salaries, - - - - -	\$35,500 00
Coal, gas, water, - - - - -	2,545 04
Repairs, - - - - -	3,411 07
Insurance, - - - - -	1,715 53
Janitorial Service, Labor, - - - - -	2,444 88
Expenses of House for Women Students, - - - - -	1,237 00
Advertising, Postage, Stationery, Catalogues, Printing, - - - - -	1,881 05
Other Expenses, - - - - -	4,302 30
Total Expenditures for the year, - - - - -	\$53,115 37

As will be seen from the above statement, the expenditures of the year exceeded the income by \$2,450.03. This deficit, however, had been anticipated, and was more than met by subscriptions from the Trustees, to the amount of \$2,750.

The above exhibit does not include receipts and disbursements on the Seney Scholarship Fund, or on the Alumni Library Fund. The income from the Seney Scholarship Fund amounted last year to \$5,000; the income from the Library Fund to \$1,071.10.

ADDITIONS TO THE FACULTY.

Dr. W. P. Bradley, elected Instructor in Chemistry, is a graduate of Williams College, in the class of 1884. Immediately upon his graduation he went to Germany, and studied two years in the University of Göttingen. In the summer of 1886 he returned to this country to accept the position of Assistant in Chemistry in Williams College. Here he remained two years. Then, in the summer of 1888, he went back to Göttingen to continue for another year his chemical studies there,—studying especially in the laboratory of Prof. Victor Meyer. He received last spring the degree of Doctor of Philosophy from the University of Göttingen.

Mr. L. Oscar Kuhns, Instructor in French, is a graduate of Wesleyan in the class of '85. A few days after receiving his diploma he sailed for Europe, and spent two years in the Universities of Berlin and Paris, in the study of modern languages,—especially the Romance languages—and of Philology. In the autumn of 1887 he returned, to accept the position of Librarian of this college, and of

the last Commencement he was given charge of the department of French. He still retains the position of College Librarian, but is relieved of a considerable part of the routine work of the library by an assistant, Mr. D. C. Abbott, of the class of '89. Mr. Kuhns spent the last summer in Florence, continuing his studies in Italian.

Mr. Karl P. Harrington, Tutor in Latin, is a son of the late Prof. C. S. Harrington, and was graduated from Wesleyan in 1882. For three years after graduation Mr. Harrington taught in the High School of Westfield, Mass. During the next two years, 1885-87, he had charge of the Department of Latin in the Wesleyan Academy, Wilbraham, Mass. In the summer of the latter year he went abroad, and spent two years in study and travel. During the greater part of this time he was in the University of Berlin, his principal studies being Latin and Classical Archæology. He also traveled in Italy and Greece with a special view to extending and illustrating his archæological studies.

In addition to the appointment of Mr. Abbott, noted above, Mr. John L. Bridge, B. S., of the class of '88, was appointed Assistant in Chemistry, and Mr. H. L. Houghton, B. S., of the class of '89 in the Worcester Polytechnic Institute, Assistant in Physics, for the present year.

DEPARTMENT NOTES.

ETHICS AND CHRISTIAN EVIDENCES.—During the past two years the course in Evidences of Christianity has been given by Prof. Rice, and that in Ethics by Prof. Armstrong. These two courses are this year in charge of President Raymond.

MATHEMATICS AND ASTRONOMY.—The relief of Prof. Van Vleck from the duties of the acting presidency has practically increased the teaching force in the department of Mathematics. This has made it possible to introduce a new advanced course—Analytical Mechanics,—which is open to election by the Junior and Senior classes.

GERMAN.—Prof. Prentice is giving a new course of lectures to the class in advanced German. The course treats of the leaders of German literature of the last century, including Klopstock, Lessing, Herder, Schiller, and Goethe.

GEOLOGY.—A new feature in the teaching of the Senior Geology class has been adopted. In the numerous field excursions which accompany the course one member of the class is made responsible for noting the observations made. This student is to give at the next class exercise a summary of the observations, in the form of a lecture to the class.

CHEMISTRY.—For the present year, Prof. Atwater will give the required course in Elementary Chemistry to the Sophomores. The course will be given during the spring term.

Dr. Bradley conducts the classes in qualitative and quantitative analysis, and the class in organic chemistry. The laboratory exercises of the required course in chemistry will be also under his charge.

The course in organic chemistry has been increased by the addition of laboratory work. This laboratory work does not take the place of the regular class work, but is voluntary on the part of the class. In the spring term this course will consist of lectures on theoretical and physiological chemistry by Prof. Atwater.

ENGLISH.—The conditions of admission to the Senior elective class in English Literature have been modified. The number of the class has been heretofore limited to fourteen. Hereafter the number admitted will be twelve; with the further provision, however, that should there be more than twelve applicants who have attained a second honor rank in the English Literature of the Junior year, the class may be enlarged, in order to admit such applicants, to a number not exceeding sixteen.

HISTORY.—Professor Wilson offers to the Juniors as an elective this year, instead of the course in English and French History given last year, a course in the History of the United States. There is to be class drill in the colonial portion of Doyle's History of the United States, in Fiske's Critical Period of American History, in Johnston's History of American Politics, and in collateral authorities during the first term; and in the second and third terms lectures on the history of the sixty years beginning with the administration of Andrew Jackson and closing with the administration of Cleveland and the end of the first century of the Constitution.

It is purposed to have this course and that on English and French History alternate with each other in succeeding years, the course in English and French History being given next year again, that in United States History repeated the year following, and so on.

BIOLOGY.—In the Senior Biology class a new course in comparative anatomy has this year been introduced. In this course the study of comparative osteology occupies the first half year, the last half being devoted to the study of invertebrates. The work consists of laboratory exercises accompanied by lectures. The course is especially designed as an assistance to those who make geology a specialty, and will be mostly confined to the study of animals whose hard parts make them likely to be found as fossils.

A part of the Senior Biology class is spending the fall term reading on the general subject of Evolution. Special reading is assigned to the members of the class, and at weekly conferences each member gives to the rest of the class an outline of his reading for the week.

LATIN.—The two higher elective courses of last year are for this year replaced by two courses that will alternate with the former in successive years, thus increasing the possibilities of election during the Junior and Senior years.

From this time forward candidates for special honors in Latin will be admitted

at the beginning of the Junior year into a special elective course continuing through two years, and conducted somewhat after the method of the German "seminary." Meetings will be held twice a week, and the course will count as a regular half-study in making up the quota of elective studies. At the satisfactory conclusion of this two-years' course the student may receive the recognition of the special honor in Latin without further formalities in the way of special work and examination, provided that the general regulations concerning special honors and candidacy therefor as laid down in the Catalogue have all been met.

The class-room library of the department has just been increased by about fifty volumes, (in part duplicates deposited by the college library, and in part contributions by the instructors,) and by photographs of several pages of *codex O* of Catullus. These were secured by Prof. Merrill during his stay in Oxford last summer for the purpose of transcribing the manuscript.

HEBREW.—A course in Hebrew is again offered as a Senior elective. The course is given by Prof. Prentice.

FRENCH.—The only considerable changes made this year in the work of the department of French consist in the introduction into each course of collateral readings, to be done outside of the class, and in the extension of the colloquial use of the French language in the class room

LECTURES BEFORE THE COLLEGE.

There will be a course of public lectures given before the college during the fall and winter term. It is expected that Carroll D. Wright, of the Department of Labor in Washington, G. Brown Goode, Director of the National Museum, and Dr. J. M. Buckley, editor of the *Christian Advocate*, will be among the speakers. It is hoped also that James Russell Lowell may deliver one lecture. Further announcements will be made later.

PUBLICATIONS.

The paper by Prof. Rice on "Science Teaching in the Public Schools," originally published in the *American Naturalist*, has been republished, with two appendices, by D. C. Heath & Co., as one of their series of Monographs on Education.

Prof. Rice has written an article on Evolution, to appear in "A Concise Cyclopædia of Religious Knowledge," edited by E. B. Sanford.

Prof. Atwater has issued during the summer several Bulletins of the Office of Experiment Stations upon various matters connected with agriculture.

Prof. Wilson has published a text-book on comparative politics, entitled "The State: Elements of Historical and Practical Politics." Published by D. C. Heath & Co.

The November *Atlantic* publishes an article by Prof. Wilson on "The Nature of Democracy in the United States."

The Biography of Willbur Fisk, by Prof. Prentice, is in press, and will soon appear in the series of American Religious Leaders, published by Houghton, Mifflin & Co.

Prof. Conn has published, as a Bulletin of the Storrs Experiment Station, a paper on "The Bacteriology of Milk and its Products," containing a summary of the results of work done here during the last year. The paper was reprinted in *Science*, Aug. 16th.

Dr. Bradley publishes two papers as theses for the degree of Ph. D.

1. Ueber die Thienylglyoxylsäure und deren Derivate.
2. Ueber Disalicylaldehyd.

Mr. Harrington has issued from the press of Ginn & Co., Boston, a volume entitled "Helps to the Intelligent Study of College Preparatory Latin."

PUBLIC ADDRESSES.

President Raymond has given the following addresses: An address before the National Convention of the Y. M. C. A., held in Philadelphia last May; an address at the convention of the Young People's Epworth League, held at Cottage City in August; also addresses commemorative of the centennial of Methodism in Connecticut, at Bristol and Bridgeport.

Prof. Atwater read a paper before the American Association for the Advancement of Science, held at Toronto, on "The Source of Nitrogen in Plants."

Prof. Winchester gave addresses before the Chautauqua assemblies at Northampton and Framingham.

Prof. Wilson gave a lecture before the Chautauqua assembly at Northampton.

Prof. Rice, in behalf of a committee of the American Society of Naturalists, addressed the New England Association of Colleges and Preparatory Schools, at its recent meeting in Boston, on the subject of the introduction of the study of Natural Science into the courses preparatory for college.

GIFTS TO THE COLLEGE.

In the last BULLETIN it was announced that Dr. Daniel Ayres had given to the college the sum of \$25,000 toward the endowment of the chair of Biology. Dr. Ayres has recently added to this amount the gift of a large tract of valuable land situated in Acquackanonk, N. J., about fifteen miles from the City Hall of New York. The value of this property is sufficient to complete the endowment of the professorship, which will probably bear Dr. Ayres' name.

THE NEW GYMNASIUM.

The committee appointed by the Alumni Association to solicit subscriptions toward the erection of a new gymnasium have organized, with Mr. Olin as chairman, and are actively at work. Their plan contemplates a building of the most approved modern style and fittings, to cost about \$50,000. This amount is to be raised by subscriptions from students and alumni of the College. The initiative was given at a recent meeting of the undergraduates, when, on the appeal of Mr. Scott, of the Alumni Committee, more than \$1,500 was subscribed amid great enthusiasm. This sum is composed of small contributions, made at a sacrifice by a large number of undergraduates, who are often called upon to subscribe liberally toward the active athletic interests that prevail in the college community. It is confidently expected that the example thus set will be followed by men of greater means, and that the desired sum will be raised without difficulty. A site for the new building will soon be selected, and ground will be broken next Spring.

JOHN LYON SMITH.

In the death of John Lyon Smith, at Middletown, on the fourth day of October, the college has lost a trustee and friend singularly endeared to it, both by his gentle character and by the remarkably extended period of his valuable service in its advisory councils. Mr. Smith was born in Ayr, Scotland, in 1797, only a year after the death of the poet Burns, of whom his mother had been a friend. When he was but four years of age his parents emigrated with him to this country, but four years later sent him back to Scotland to live with an uncle. There he remained fifteen years, and learned the jeweler's trade. Coming to Middletown in 1820, he established himself two years later in the business that he did not relinquish for sixty-two years. Thus for more than half a century his kindly face, framed by the window of his shop as he bent over his workbench, and surrounded as the years passed by with the halo of white hairs, was a daily familiar sight to the successive generations of college boys. Mr. Smith was deeply interested in the establishment of a college in Middletown, and in his house were held many of the consultations that resulted in the realization of his hopes. He was a member of the first Board of Trustees of Wesleyan University, and remained in that office till his death, serving also for a long period as the Treasurer of the Board. At each meeting of the Board held in Middletown, from the first to that of last June, he was present, and his lively interest in the institution of which he watched the beginnings never flagged.

In 1884 he gave up his business, but continued in good health, and was seen walking daily about the streets and sitting on Sundays in his accustomed place in the church. Not till a few days before his death did his strength so fail as to confine him to his room, but from that time he gradually sank till he passed gently and painlessly out of life, leaving behind him the cherished memory of a sweet and spotless character.

PREPARATORY WORK IN ROMAN HISTORY.

Our preparatory schools are already overtaxed by the various and ~~increasing~~ increasing demands made upon them by the colleges. The resources of the colleges are, as a rule, growing faster than the resources of the schools, and the speed of change and improvement possible to the one is not often possible to the other. There are few things more mournful to the listener, or more reproving, if he be a college man, than the discussions of grievances to be heard at conventions of schoolmasters when the theme is preparing boys for college. It is therefore a grateful circumstance that one can once and again make a suggestion to the heads of preparatory schools which they can adopt without either increasing their teaching force or changing their class-room methods.

What is needed in the way of improvement in preparatory instruction in Roman history is, to put it summarily, a recognition of the fact that Roman history is not history simply, but the material of much of the world's literature besides. It is generally assumed by the teacher of ancient history, naturally enough of course, that his chief if not his sole function is to lay the foundation for his pupil's further pursuit of historical studies in college, or, more concretely still, to make him ready for the college entrance examination. As a matter of fact, however, it is not the college professor of history only, but also the college professors of literature to whom it is a matter of vital interest that Freshmen should have been schooled in ancient history; and the trouble is that the professors of history and the professors of literature want, not the same sort, but different sorts of preparatory instruction in this branch. There are, as everybody by this time knows, two histories of Rome, the one traditional and improbable, the other that which has been produced by treating the traditional with the acids of criticism, and which is regarded as probable because indestructible by such treatment. The first is that which is told by Livy; the second, that proposed by Niebuhr, reduced to its coldest outlines by Ihne, expanded to new imaginative proportions by Mommsen.

But it is the legendary history only which has entered literature; Roman history as reconstructed by modern criticism has found entrance nowhere except into scholarship. The Roman writers themselves believed as Livy did, and accounts like his of the origins and early history of the imperial city run like a rich embroidery over the whole of the literary work of his race. They repeat, reform, re-moralize upon the tradition of their city in every manner known to their art. Unless you know the stories as they did, you cannot understand the historical allusions with which Roman prose and Roman poetry alike overflow. And not only so. The stories are told and told again in all modern literatures. The imaginations of neither Italians nor French nor Germans nor English waited to be chastened by the modern criticism. They accepted the fascinating old tales with a faith as ready and as apt at digesting as that of the Roman imagination itself. Modern literatures are saturated with the same colors of legendary history that have taken hold of the canvasses of the old masters of classical literature. Livy's fictions are realities so far as the imaginative, and

even the moral and political, writings of subsequent ages are concerned. Niebuhr failed to get in at the death, so far as the matter affects them.

It is indispensable to the teacher of literature, therefore, that his pupils should know the traditional history of Rome; the critical history of the city is of little or no consequence to him; and now that the preparatory schools are buying and using text-books built upon Niebuhr and Mommsen, there is nothing left for the professors of literature, at any rate for the professors of Latin literature, to do but to turn to and teach their pupils what the professors of history inform them is quite unworthy of serious belief. The schools are using Leighton and like text-books, in which all the legendary history that is given at all is relegated to disconnected foot-notes, which the pupil either skips or reads without realizing—reads with a torpid imagination. The school-teacher is at the same time at a very considerable disadvantage in trying to make his pupils realize the history of Rome as it really was, with the aid of such books. They are at the age to accept legends with interest and satisfaction, as they never can accept them afterwards; and they are not at the age to care very much about a history in which so little that is entertaining happened, as appears in the veritable history of the city by the Tiber. They are not prepared to appreciate historical criticism, and they are prepared to miss the things that historical criticism denies them. The facts of Roman history now left standing in the early periods are fragments—the wholes of which they formed parts are largely conjectural; and when the pupil reaches the periods of greater certainty, touching which the Latin historians are to be credited, he finds himself on an arid plain of constitutional, agrarian, social struggles and factional contests. His sole entertainment is afforded by foreign wars. The attempt to get the scientific history of Rome into his mind to remain a part of it is largely futile.

The legendary history of Rome, on the other hand, is a whole not only, but a poetical whole as well, with claims upon the unscientific attention which no young mind is likely to deny. It is a history apparently made for school-boys to believe. It could not by clever invention have been given superior qualities of adhesion to whatever young brain it touches. The schoolmaster has been obliged, therefore,—such is the sum of the whole matter,—to abandon an old and relatively easy task for a new and partially impossible one.

The result is of the simplest kind. The college teacher of history finds his pupils without real critical knowledge of the history of Rome; and the teacher of the classics finds them quite unable to understand the historical allusions with which their authors abound, as much alienated from Virgil and Horace as from Livy. This leaves the college to repeat the experiment of the school: to re-inculcate the conclusions of modern critical investigation and surmise, and to patch together anew the bits of story which for so many centuries have served literature in the stead of history.

The thing needed is, a more natural division of labor. Let the schools teach the history which Livy believed, the colleges that which modern scholars believe. Let the candidate for entrance into college be examined on the *story* of Rome, the candidate for graduation on her history.

There is, of course, another way out of the difficulty. That is to abandon ancient history as a condition for entrance, and substitute the history of the United States, with or without the addition of the history of England. But that is a step which leads directly away from real literary culture. Roman history as conceived by the Romans is indispensable to the student of thought. Nothing which has entered into the belief and the imagination of every generation of men that has lived from the centuries when history was born down to this present century in which it is grown most critical and self-conscious can be left out of the catalogue of things which every man of education should know, if not well, then as well as may be under existing conditions.

Of course these considerations apply in not a few respects to Greek history no less than to Roman. Greek legendary history is more consistent, less conglomerate than Latin. It is in a sense also more credible. It is easier to perceive its meaning and trace the lines of fact lying at its foundations. Greek history, accordingly, has been less radically reconstructed by modern criticism. It would still present to the Greek eye not a little that was recognizable. But it is crowded with myth, none the less, and needs critical sifting. In its case, as in the case of Roman history, the sifting should be done in college rather than at school, in order that literary culture may be served no less than historical knowledge.

Thus much being said, by way of suggestion, on one head and to one intent, perhaps a single note on another head and to a different intent may be unobtrusively smuggled in at the end. It would seem, to judge by results, that ancient history has lost its hold upon Livy and Herodotus not only, but also upon exact geography. It has not retained the hazy conceptions of history characteristic of the ancient, but it has retained his vague ideas of geographical location. Is it not the experience of college examiners that famous towns and storied rivers are given whole coasts and entire regions as their whereabouts in the understanding of the pupils whom the schools have very carefully instructed in the location of each village in their own State?

W. W.

CALENDAR.

1889.

Sept. 12, Thursday,—First Term began.

Nov. 27, Wednesday noon,—Thanksgiving Recess will begin.

Nov. 30, Saturday,—Thanksgiving Recess will end.

Dec. 18, Wednesday noon,—First Term will end.

1890.

Jan. 2, Thursday, 9 A. M.,—Second Term will begin.

Jan. 30, Thursday,—Day of Prayer for Colleges.

Feb. 10, Monday,—Midyear Examinations will begin.

Feb. 22, Saturday,—Washington's Birthday.

Apr. 1, Tuesday,—Junior Exhibition.

Apr. 2, Wednesday noon,—Second Term will end.

Apr. 4, Good Friday.

Apr. 6, Easter Sunday.

Apr. 10, Thursday, 9 A. M.,—Third Term will begin.

June 25, Wednesday,—Commencement Day.

—THE—

Wesleyan University Bulletin.

MIDDLETOWN, CONN.

MAY 31ST, 1890.—No. 6.

THE college year just closing may certainly be accounted one of the most prosperous in the history of Wesleyan University. The number of students in attendance throughout the year has been larger than ever before. The intellectual and moral spirit of the whole body of students—the tone of scholarship and the tone of character in the college—were certainly never better. And the amount of the financial gifts to the college, aggregating nearly four hundred thousand dollars, is larger than in any previous year. The munificent gifts of Dr. Ayres will, it is confidently hoped, hasten such further much-needed aid to other departments as he has given to the scientific side of the college work.

The departmental statements given on a following page indicate various enlargements and modifications of the course of instruction that are contemplated for next year, and it is expected that further changes and additions may be made which cannot be definitely stated until after the meeting of the Trustees.

It is a matter of general regret that the college must lose the valuable services of Professor Woodrow Wilson, who has accepted the Professorship of Jurisprudence in Princeton University. The chair of history, left vacant by his resignation, will undoubtedly be filled by the Trustees at their next meeting.

TRUSTEE MEETING.

The adjourned annual meeting of the Trustees of Wesleyan University was held in New York City, Dec. 13, 1889, with twenty-six members present.

The vacancy in the Executive Committee, caused by the resignation of John D. Slayback, was filled by the unanimous election of Mark Hop.

The committee on the board of instruction was reappointed. This committee consists of Stephen H. Olin, Geo. G. Reynolds, Edson W. Burr, Wm. Hoyt, Samuel F. Upham and the president of the university *ex officio*.

Prof. Rice was appointed the representative of the university on the Board of Control of the Connecticut Agricultural Experiment Station, *vice* Prof. Atwater, resigned.

The Executive Committee was authorized at its discretion to purchase the tract of land situated on the north corner of College and High streets, in Middletown, and the thanks of the Trustees were extended to Miss Susan C. Clark, of Middletown, for her gift of certain adjacent land in connection therewith. The purchase was effected, and the University now owns this valuable corner property with a frontage, together with Miss Clark's gift, of 140 feet on High street and 170 feet on College street.

The leave of absence for a part of the year granted to Prof. Atwater to enable him to serve as Director in the Office of Experiment Stations of the Department of Agriculture at Washington, was continued, and the appointment of Dr. W. P. Bradley, at present serving as Instructor in Chemistry, was extended for three years.

President Raymond and Dr. M. D'C. Crawford were appointed a committee to investigate the plan of heating all the college buildings with steam by a single system, and to report at the next meeting of the Board.

It was ordered that the professorship of Biology, recently endowed by the generous gifts of Dr. Daniel Ayres, of Brooklyn, should be known as the Daniel Ayres Professorship, and a committee was appointed to express to Dr. Ayres the gratitude of the Trustees.

At this point Judge G. G. Reynolds announced that Dr. Ayres had just placed in the hands of the Treasurer the additional gift toward the endowment fund, in cash and approved interest bearing securities, of \$250,000. Amid great enthusiasm further resolutions of gratitude were adopted, and a motion was carried that an additional sum of \$250,000 be raised for the same purpose. Of this sum, subscriptions amounting to \$52,000 were made upon the spot.

The President of the University, the President of the Trustees, and Prof. Van Vleck were appointed a committee to confer with Dr. Ayres concerning the precise disposal of his last gift, and after some routine business the meeting adjourned.

THE NEW GYMNASIUM.

We are informed from the Committee of Alumni in charge of this enterprise that very gratifying progress has been made in the soliciting of subscriptions, and that the coming commencement season may be expected to witness substantial fruit from their labors.

RECENT GIFTS.

The memorable gift of the present college year is that of Daniel Ayres, M. D., LL. D., who, on the 12th of December last, turned over to the Treasurer of the college, cash and securities to the amount of two hundred and fifty thousand dollars. This sum is added to the endowment fund of the college, and is to be used "for scientific purposes."

It will be remembered that somewhat more than a year ago Dr. Ayres gave the college the sum of \$25,000 towards the endowment of a chair of Biology, and that last fall he further gave, for the same purpose, a tract of land in New Jersey of sufficient value to complete the endowment of the professorship.

The total amount of Dr. Ayres' gifts to Wesleyan University is, therefore, fully three hundred thousand dollars.

At the meeting of the Trustees, in December last, at which this gift of Dr. Ayres was announced, a movement was started to raise a further sum of two hundred and fifty thousand dollars to be added to the endowment fund. This movement is now being pressed. Up to the present time about eighty-five thousand dollars have been pledged by members of the Board of Trustees only, on condition, however, that the whole sum be raised.

Several interesting gifts to the newly-formed Coin Collection are more particularly mentioned elsewhere.

WESLEYAN UNIVERSITY CLUBS.

The New York Club's annual dinner was held at Clark's on the evening of Dec. 13, 1889. One hundred and five members were present to celebrate the twenty-first anniversary of the club's existence, and the enthusiasm that prevailed was raised to a higher pitch by the announcement of the great gift to the college by Dr. Ayres that had just been made known to the Trustees. President Raymond and Profs. Van Vleck and Merrill spoke for the college and its faculty, while the undergraduates had their especial representative in Mr. E. S. Tasker of the senior class.

About fifty members of the Boston Club dined at the Revere House on the evening of Dec. 9, 1889, under the rule of Rev. Frederick Woods, D. D., '59, as President, and G. W. V. Rice, '75, as toastmaster. President Raymond, Profs. Van Vleck and Conn, and Mr. Van Vleck were present from the faculty, and Mr. L. N. Crane of the senior class from the body of undergraduates.

The Association of Northeastern Pennsylvania was entertained on the occasion of its annual meeting, Jan. 13, at the residence of Mr. George S. Bennett in Wilkesbarre. President Raymond and Messrs. E. S. Furnel and G. E. Peck of the senior class were the representatives present from the seat of the college.

The Association of the Northwest held its annual meeting this year, March 6, at Evanston, Ill., under the hospitable shadow of Northwestern University. President Cummings, then apparently in his usual health, and about forty other

Alumni, young and old, were present, and extended a hearty greeting to President Raymond, who was making them his first official visit. An interesting incident of the business meeting consisted in the appointment of a committee to consider the question of raising a fund to establish a competitive scholarship at Wesleyan University open to students from that section of the country.

The Alumni Association at Washington entertained President Raymond and Prof. Atwater at its annual dinner, given April 8, on which occasion about thirty Alumni, chiefly those resident in the city and its immediate vicinity, gathered and enjoyed a hearty and enthusiastic meeting.

The annual meeting of the Wesleyan University Alumni Association of Southern California will be held at Pasadena, Cal., early in July. Senator Cornelius Cole, '47, is president of the club, and E. P. Clarke, '85, is secretary. Prof. Merrill is expected to be present at the meeting to represent the college.

MIDDLETOWN SCIENTIFIC ASSOCIATION.

The following meetings of the Middletown Scientific Association have been held during the college year :

October 8th.—The fishy odor of our drinking water ; H. W. Conn. On the gabbro and associated rocks of Waterville, N. H. ; W. N. Rice.

November 12th.—On the calorimeter ; H. B. Gibson. The trap and sandstone of the Connecticut Valley ; W. N. Rice.

December 10th.—Chemical formulæ ; W. P. Bradley. Atmospheric nitrogen as plant food ; Chas. D. Woods.

February 11th.—On the bacteria of milk ; H. W. Conn.

March 11th.—Experiment Stations in the United States, and the Office of Experiment Stations at Washington ; W. O. Atwater.

April 15th.—Modern views of heredity ; H. W. Conn.

May 13th.—The faults in the Connecticut Valley Sandstone and their influence on the topography ; W. N. Rice. The Aladdin Cooker and the Aladdin Oven ; Chas. D. Woods.

DAY OF PRAYER FOR COLLEGES.

The last Thursday in January was observed, as usual, by the suspension of all scholastic exercises and the holding of special religious services. But contrary to the custom that has prevailed during the last few years, no preacher from abroad was secured, but President Raymond took charge of the services, preaching himself in the morning and conducting a prayer and conference meeting in the evening. Prayer-meetings were also held privately by the several classes at convenient hours during the day. Considerable numbers of the townspeople united with the college in the observance of the day, which was characterized by very unusual earnestness and depth of feeling that has had a marked and lasting influence upon the spiritual life and general moral tone of the college community.

Y. M. C. A. WORK.

The New England College Y. M. C. A. Conference held its annual session at Wesleyan, January 24-26. Delegates were present from twenty-two institutions. Besides the general discussions of the several sessions on various phases of Y. M. C. A. work, public addresses were given by Rev. Arthur Little, D. D., of Boston, on "Enthusiasm in Christian Work;" on "Opportunities for Christian College Graduates," by President Raymond, Rev. David Allen Reed, Luther Gulick, M. D., and R. E. Speer; on "Personal Work," by H. Clay Trumbull.

The interest of the Convention centered about two great topics, viz., "The Study of the Bible," and "Missionary Work." Several classes have been organized in the college for the study of the Bible.

JUNIOR EXHIBITION.

The annual Junior Exhibition was held on the evening of Tuesday, April 1

The Committee of Award were Professor John Humphrey Barbour, M. A., of the Berkeley Divinity School in this city, George L. Fox, M. A., of New Haven, and Rev. Wallace MacMullen of Springfield, Mass. These gentlemen awarded the first prize to Frederick A. King for an oration on "Frederic Denison Maurice—Humanist," and the second prize to Albert E. Hancock, whose subject was "Realism in Modern Art."

LECTURES AND PUBLICATIONS BY THE FACULTY.

Since the date of the last BULLETIN, Dr. Raymond has delivered an address on "Denominational Education" before the New York Preachers' Meeting, the annual address at the anniversary of the Young Men's Christian Association in Boston; an address on "Higher Education" before the District Preachers' Meeting held in New Haven; and addresses on "The Relation of Education to the Church" before the Methodist Social Unions of New Bedford and Springfield, Mass., and Providence, R. I. He has, in addition, addressed the Wesleyan Alumni Associations of Washington, New York, Boston, Chicago and Wilkesbarre.

Professor Rice delivered two addresses before the Young Men's Christian Association of Wyoming Seminary on April 3, 1890, and on May 18 preached at Wellesley College.

Professor Atwater has lectured during the winter under the auspices of the Smithsonian Institution and of the Scientific Societies of Washington on "The Physiological Economy of Foods" at the U. S. National Museum, and at the annual meeting of the American Public Health Association in Brooklyn on "Food and Health." The last-named lecture is to be published in the annual report of the Association. Professor Atwater has also published, in collaboration with Mr. C. D. Woods of the Storrs Experiment Station, a

paper on the "Sources of the Nitrogen of Plants" (Report of the Storrs School Agricultural Experiment Station, 1889), besides issuing a number of reports and bulletins of the Office of Experiment Stations of the United States Department of Agriculture.

Professor Winchester delivered four lectures at Wells College during Thanksgiving week, 1889. During the same month he delivered an address on "Literature as an Agent of Christian Culture" before the Ministers' Association of the New Haven District of the New York East Conference. He gave the same address on the 17th of March, 1890, before the Methodist Social Union of Boston. The address was published in *Zion's Herald*, April 2, 1890. He is now delivering in Hartford a course of four new lectures on four Victorian writers, viz.: Carlyle, Clough, Arnold and Browning. He has lectured altogether during the year about thirty times in various places, among others in Brooklyn, Hartford, Springfield, Norwich, and Scranton.

Professor Wilson lectured during the winter before the Ladies' Missionary Society of the Methodist Episcopal Church, Middletown, on "A Literary Politician;" before the Y. M. C. A. of Middletown, on "Leaders of Men;" before the Brown University Historical and Economic Association, Providence, on "The Functions of the State;" and before the Massachusetts Society for the Promotion of Good Citizenship, Boston, on "Systems of City Government." In February and March he delivered his usual course of twenty-five lectures before a class of graduate students at the Johns Hopkins University, the subjects of the course of this year being "Municipal Government," "The Theoretical and Practical Distinctions Between Law and Ordinance," and "Systems of Administrative Justice."

Professor Conn has lectured, since the publication of the last BULLETIN, at four places on "The Bacteria of Milk," viz.: at Birmingham, Ct., before the State Board of Agriculture; at Woodbury, Ct., before the Connecticut Dairy Association; at Lebanon, Ct., (Dairy Association), and at Jewett City, Ct., (Dairy Association). This lecture has been published in the reports of the State Board of Agriculture. He has also published in the number of the *Methodist Review* for January, 1890, an article entitled "The Study of Science and the Christian Faith."

Dr. Bradley has delivered an address before the Young People's Society of the North Church, Middletown, on "The Norse Discovery of America," and an address on "High License" before the Middletown Reform Club.

THE M. A. DEGREE.

Since the new rules of graduate study for the Master's Degree were put into operation in October last by the election of a permanent committee of the faculty to superintend their administration, quite a number of the graduates of the college have qualified as candidates. It is noteworthy that all of these, having graduated before the adoption of the new rules, are entitled to receive

the degree by mere lapse of time, but prefer to earn it by study under the direction of the faculty. The courses of those who have so far applied lie in the departments of Biology, Geology, English Literature, Mathematics, Political Economy, and Greek. The most forward class in the matter is the class of 1888, from which there are already three candidates. The majority of candidates, it is encouraging to report, are studying in residence. Apparently the one year of resident study required by the new rules will enjoy a preference as compared with the three years of study *in absentia*.

GRADUATE INSTRUCTION.

The change in the plan for awarding the degree of M. A. has emphasized the demand for graduate instruction which has been felt for a number of years and in which the college has not been hitherto in condition to offer special courses. Arrangements for graduate work for the coming year are being made in several departments. The number of courses offered is, at the present time, small, but it is hoped that they will be increased in number and range.

In providing for graduate work and thus moving toward the idea of the university, the fundamental importance of independent investigation is recognized. The American college has come to be an institution whose design is to give mental training and the broader culture desirable for influential citizenship, as well as to prepare in a measure for professional or business life. Undergraduate study does not, and as a rule cannot, give the student opportunity to acquire clear understanding and adequate grasp of the processes by which the problems of modern thought are studied and solved. Graduate work must therefore be of a different character from that of the undergraduates, both in its aims and its methods. There is need of independent study in which the student shall devote himself to specialties and have the opportunities of the library and the laboratory, and also the means for learning the methods of advanced study and criticism and the stimulation of personal contact with leaders in thought. A prime requisite is research in its broadest sense, in which the teacher shall lead and the student shall follow. As will be seen in the department notes on another page, several of the departments are prepared to offer more or less facilities for such work. A number of graduates of this and recent years are planning to be in attendance upon these courses during the next year.

DEPARTMENT NOTES.

MATHEMATICS AND ASTRONOMY.—There will be offered next year an additional course in astronomy, elective for Classical and Latin Scientific Juniors and Scientific Sophomores. It will thus be possible hereafter for a student to devote two years to the study of practical astronomy.

A complete set of the *Mathematische Annalen* has been purchased for the Library. The earlier numbers of this valuable journal are out of print and difficult to obtain.

A set of Brill's Models of Surfaces of the Second Order has also been recently purchased.

Graduate Instruction.—The department is ready to undertake graduate instruction.

GEOLOGY.—*Graduate Instruction.*—The department is prepared to undertake graduate instruction next year. The details of the course are not yet fully arranged, but it will include study in paleontology based upon the collections in the museum, work in microscopic lithology, and a certain amount of field work with reference to some department of local geology.

CHEMISTRY.—A large room in the basement of Judd Hall is to be fitted with eighty or more desks for a laboratory of elementary chemistry. Increased apparatus, room and other facilities for advanced students in organic and physiological chemistry, and for investigations in those specialties, are to be provided in the main laboratory.

Graduate Instruction.—Plans are being made for graduate instruction and research the coming year. They include laboratory exercises in organic chemistry with lectures and collateral reading; a course of lectures in theoretical chemistry; a course of lectures in physiological chemistry with collateral reading and laboratory work, and experimental investigations of special subjects.

In the course in organic chemistry, which will be a continuation of the undergraduate work in that subject, the student will be expected to make a series of preparations of the compounds of carbon so selected as to give a reasonably thorough familiarity with the more general and important of the so-called organic reactions. The purpose of the lectures in theoretical chemistry will be to illustrate the fundamental theories of the science by the carbon compounds and their reactions. The work in physiological chemistry, which is intended for those who wish to specialize in that subject or in biology, as well as for those who contemplate the study of medicine, will be best pursued after or in connection with the course in organic chemistry.

A considerable amount of research is now being carried on in connection with the experiment station and otherwise. Plans are being made for the continuation of investigations on the heats of combustion of organic compounds, and on the sources of the nitrogen of plants, and for special inquiries in organic chemistry. In these it is expected that opportunity will be given for graduate students to share.

Graduate students in other departments will be provided with such instruction in organic and physiological chemistry as may be adapted to their special wants.

The requirement for entering upon the graduate courses will be the satisfactory completion of all the courses in chemistry now offered in this college to undergraduates, or a fair equivalent.

At the meeting of the American Association for the Advancement of Science, in August, 1889, an appropriation of one hundred and fifty dollars was made from its research fund in aid of an inquiry, in the chemical laboratory of Wesleyan University, regarding the heats of combustion of organic compounds, by use of the calorimeter. This gift has been supplemented by one of fifty dollars from Mr. C. W. Smiley of the class of 1874. The research has been prosecuted by Mr. H. B. Gibson, A. B., Harvard, 1888, under the direction of the head of the department, and has already brought results of no little interest.

PHYSICS.—In the required sophomore course in physics less time will be given next year than heretofore to mechanics allowing an extension of the time devoted to other branches of physics. A short supplementary course in mechanics will also be offered as an elective, either in this department or in connection with some of the mathematical courses. This elective will be designed specially for those who purpose to pursue the elective courses in mathematics and physics.

The room in Observatory Hall, now used as the main room of the physical laboratory, will probably be changed into a lecture room, while the physical laboratory will take possession of four rooms on the ground floor in addition to those which it already occupies there.

Important additions will also be made to the supply of apparatus in the departments of optics and electricity.

BIOLOGY.—The completion of the endowment of the department through the generosity of Dr. Ayres and the probability of the employing more assistance to carry on the work, will make it possible to develop the department more than has hitherto been done. The following changes and additions are contemplated for next year:

Course in Botany and Physical Geography.—In this course the botany has hitherto occupied the winter and spring terms. Hereafter the class will meet three times a week instead of five times a fortnight, and the course will be so expanded as to be a course in biology, physical geography, and botany. For about eight weeks in the fall the class will study the elements of general biology. This will be done almost wholly by means of practical work, consisting of the study of two or three forms of life and the general principles concerning the relation of animals and plants. This course is to serve as an introduction to all the subsequent courses in biology. The physical geography will follow this and will continue till near the end of the winter term. At that time the study of botany proper will begin, and after a few lectures upon physiological botany, the class will spend the time until commencement in the analysis and description of flowers.

Practical Biology.—Changes in the laboratory facilities are to be made which will make it possible to accommodate larger classes than hitherto. All restrictions concerning the election of this study are therefore removed, and the course is open to all juniors and seniors. The laboratory will be open every

afternoon, although regular instruction will be given only on three days of the week.

Practical Physiology.—The senior biology class course is to be increased in its scope by the addition of a definite course in experimental physiology. Apparatus for this purpose has been ordered from Germany abundantly sufficient to offer necessary facilities for an elementary course in practical physiology. This work is primarily designed for those who are intending to study medicine.

It may be well to state here that the courses in practical biology are not rigid in their details, but are designed to take the place of advanced electives in the department. The nature of the instruction being largely personal, admits of considerable variation. Instead of taking the general course the student may, with the approval of the Professor in charge, devote himself to special parts of the work. A course of reading upon biological subjects, accompanied by frequent conferences with the Professor, may be substituted for a part or a whole of the practical work in special cases. It is always expected that in the second year the student will devote his time to a line of work best suited to his future plans.

Graduate Instruction.—The department is prepared to undertake graduate instruction. The central feature of such instruction will be research, for which increased laboratory facilities will be offered next year. Investigations are now being carried on upon the bacteriology of milk, and upon the functions of the nervous system of Arthropoda. These will be continued, and graduate students will be expected to share in them.

The instructors and graduate students of the Biological and Geological departments will establish a seminary. In this seminary the work will be done conjointly by the instructors and students. It will consist of reviews of papers, discussions of current biological and geological topics, papers on special subjects assigned, and reports and criticism of special work.

It is planned hereafter to have a course of graduate lectures of two a week. These lectures will have direct bearing upon the work being done in the laboratory, but the subject will not be the same in successive years. For next year the subject will be, "The Senses, Instincts and Intelligence of Animals."

LATIN.—The convenient and well-fitted room adjoining the Latin classroom in South College is after this academic year to be used solely as the study and place of meeting of the advanced students in the department who are members of the Latin Seminary.

Large additions, chiefly of lantern-slides, will be made to the collection of material to be used in illustration of projected courses of instruction in Roman Topography and Private Antiquities.

Graduate Instruction.—Graduate instruction is offered for the next academic year, consisting chiefly in the investigation of historico-literary questions and problems of textual criticism as exemplified in the works of Catullus. This course will be carried on partly in connection with the regular Latin Seminary,

and partly by private work under the systematic supervision and instruction of the Professor in charge.

PHILOSOPHY.—The principal changes in this department during the last year have been the substitution of lectures for portions of the text-book work, and an increase in the time devoted to the study of philosophical classics.

It is in contemplation to develop this latter feature of the course still further in the coming year, and to offer it as a new elective to the Senior class. It will be conducted by Prof. Armstrong.

President Raymond expects to offer next year a new course, elective for seniors, on the relation of philosophy to theology.

Graduate Instruction.—The department is prepared to begin the instruction of graduate students, especially in the history of philosophy.

ROMANCE LANGUAGES.—The amount of instruction in this department will be somewhat increased. The programme for next year is as follows:

French.—I. A course consisting in the study of elementary grammar, translation of English into French, dictation, and reading, partly at sight, of at least 300 pages of easy prose. In addition to the above work the class will be divided into small sections, and an opportunity will be given for systematic personal drill in pronunciation.

II. The study of advanced grammar, translation of connected English into French, and the reading of at least 1,000 pages of modern prose and comedy. An opportunity will be given to those who take this course to form a class in conversational French to meet twice a week. From time to time informal lectures on various topics will be given in French.

III. A course in French literature in which certain authors will be studied in connection with their times. It is desired to carry on this course entirely in French. To this end all who contemplate electing it are advised to attend the class in conversation with some degree of regularity.

Italian.—I. An elementary course similar to Course I. in French.

II. Tasso—*La Gerusalemme Liberata*. Dante—*La Divina Commedia*.

These two courses in Italian are to be given on alternate years, and are elective only to those who have taken at least one year in French.

There are certain other changes in contemplation in these and other departments, which, being partly dependent upon the action of the Trustees, cannot be announced at the present time.

CHANGES IN THE COURSE OF STUDY.

It has been determined to abandon the elaborate system of "star" and "dagger" studies, half studies, whole studies, and the rest of the complicated arrangements of the past few years, and establish instead a system at once simpler and more uniform. After the present college year the exercises in each course

will be held a uniform number of times each week; all the so-called half-studies of the present system will be so shortened or extended as to occupy two or three hours a week without variation, and the work of each student will be limited to fourteen hours a week as a minimum, and seventeen hours a week as a maximum. Rhetorical exercises are to be left with an exceptional standing: they are not to occur a fixed number of times each week, and they are not to be reckoned in the fourteen hours minimum of work, or in the seventeen hours maximum. Those studies, moreover, in which the work is of such a character as not to be proportional to the number of hours of attendance upon class exercises, are to be allowed an exceptional valuation in the time reckoning, so that they may be counted as equal in amount to a three or a two hour course, notwithstanding the fact that they represent, as a matter of fact, a smaller number of hours spent in the class-room. By special vote of the faculty the rule as to the maximum or minimum number of hours of work allowed each student may be suspended in individual cases of an exceptional character. This is substantially all that it is possible to say of the system before it is put into actual operation.

THE COIN COLLECTIONS.

About the beginning of the present calendar year a movement was set on foot to place the coin and medal collections of the college on a more substantial basis and make them more available for the invaluable purpose of illustrating the development of art and the march of political and social progress. This effort has been successful to a very gratifying degree. The personal solicitation of gifts and the appeals published in the *College Argus* and elsewhere, have met with a generous response, and the number of selected specimens in the collections, exclusive of duplicates, has been thereby already trebled. The most noteworthy gift has been that of the Rev. Marcus L. Taft, '73, a missionary of the Methodist Episcopal Church to China, who presented his collection of 1750 pieces, chiefly of Chinese coinage, and many of them of exceedingly rare and valuable types. Several other gifts from members of the faculty and others have been of several hundred pieces each, while some of the most interesting and valuable additions have been of but a few coins each or even of single pieces. The small room in the northeast corner of the Library has been furnished with a substantial and handsome oak case of special construction, with a capacity of somewhat more than ten thousand coins, while special and representative collections and single specimens of exceptional interest are placed on exhibition in show cases in the Museum.

Contributions of coins, medals, of numismatic books and periodicals, and of money for further purchases are especially solicited by the Curators of the Coin Collections, and no contribution is too small or common to be of value in some direction.

THE NEEDS OF THE COLLEGE.

Each BULLETIN is in the nature of a report of progress, and no report of progress would be complete without a statement of needs. And yet a full statement of needs would be, in appearance at least, a mere specification of limitations and discouragements. In truth, however, it is no such thing, if made in candor, but rather an evidence of self-examination and conscious purpose of improvement.

Everybody connected with Wesleyan or interested in her work and prospects realizes the fact, now very evident indeed to those who are using her resources, that this is a turning point in her development. She is just now consciously obeying those tendencies of modern education which are compelling every institution of any strength or ambition to undertake the most advanced forms of instruction. She is heartened and encouraged in this by the munificent gifts which have recently been poured in upon her. But those very gifts make her need of money greater than before. They spur her on—it has been the intention of her benefactors to spur her on—to undertake greater functions than ever before; and for symmetry, even for moderate success in such new undertakings, she needs much more money than she now has.

Thousands of dollars will purchase scientific apparatus; only hundreds of thousands will suffice to supply the library, and keep it supplied, with the books which are the apparatus of advanced study in the languages, in history and in philosophy. Laboratory instruction, moreover, which is the most vital and fruitful part of instruction, both in elementary and in advanced study in the scientific departments, is possible with a somewhat smaller corps of instructors than would suffice for adding graduate lecture courses and careful personal superintendence and criticism of independent graduate investigation to the lecture studies and class drill in undergraduate courses in those departments which can have no laboratories and must yet have systematic instruction. In brief, unless many additions be speedily made to the number of instructors in the languages, in philosophy, in history and politics—in all the non-laboratory branches,—these branches must necessarily lag behind the scientific in advanced instruction, and the development of the college must be one-sided.

In other words, the addition of graduate to undergraduate instruction must necessitate rapid and almost constant additions to the force of instructors besides a large immediate and a steady future addition to the resources of the library. The moral is as plain as a pikestaff; and the college is not begging in any sense, but only stating its administrative needs as an intelligent servant of its constituency, when it says very earnestly that its development will be far partial, and, what is worse, will be unsymmetrical, unless it be persistently aided by gifts, unless its needs receive generous satisfaction.

JOSEPH CUMMINGS.

Many alumni and friends of Wesleyan University have heard, with personal regret and a sense of personal loss, the news of the death of ex-President Cum-

gings. In Middletown he will always be remembered with deepest respect, and his administration will always be reckoned one of the most vigorous and progressive periods in the history of Wesleyan University.

At the first meeting of the faculty, after the news of his death, the following minute was adopted :

"In the death of Rev. Joseph Cummings, D. D., LL. D., President of Wesleyan University from 1857 to 1875, we recognize the loss of a prominent worker in the cause of Christian education, and a man of great virtues and eminent ability.

"During the years spent in the pastorate, Doctor Cummings filled most acceptably the pulpits of the most prominent churches of the New England Conference. He was an impressive preacher, swaying a congregation by the force of his personality. He was a faithful and laborious pastor, under whose charge no interest of the church was neglected.

"But the part of his work for which he will be best remembered is that which was connected with educational institutions. He was one year Professor of Theology in the Methodist General Biblical Institute, Concord, N. H.; three years President of Genesee College, Lima, N. Y.; eighteen years President of Wesleyan University; two years Professor of Mental Philosophy and Political Economy in Wesleyan University, and nine years President of Northwestern University.

"Doctor Cummings' administration as President of Wesleyan University will be memorable in the history of the institution for the great advance in its material equipment. The row of buildings which form the chief adornment of the campus—the Memorial Chapel, Rich Hall and Judd Hall—will be his monument forever. It was also during his administration that the Astronomical Observatory was erected and supplied with its great equatorial, the Alumni Library Fund raised and invested, and the Museum of Natural History founded by the purchase of the Franckfort and Shurtleff Cabinets.

"As a teacher, Doctor Cummings was remarkable for his power of stimulating thought in the student. Some of us, in common with multitudes of the alumni of the various institutions with which he was connected, will always remember with gratitude the intellectual awakening received in his recitation-room.

"Doctor Cummings was always active in benevolent and reformatory movements. He was an earnest worker in the cause of temperance. In the outburst of patriotic enthusiasm which in the beginning of the war vindicated the nation's right to be, he bore well his part. He was always recognized in the community as a leading citizen.

"Doctor Cummings was a man of tremendous industry. His lamp always burned far into the night; and the amount of work which he accomplished would have early broken down one whose nerves were not of steel. Death has brought to him the first rest he has ever known.

"His was a masterful spirit, but he had a heart of womanly tenderness. To many a student, in sickness or distress, he ministered with a sympathy which will be held in fond and lifelong remembrance.

"The revelations which we have seen of the strong man's tenderness give us some conception of what he must have been to those who knew and loved him best. We tender our sympathy to his bereaved family, and we trust that, in his death, the faith in which he lived may be their comfort. We invite them to lay his body in the soil which is already sanctified by the presence of the great and good with whose name and memory his will be forever associated."



Commencement Calendar.



The programme for Commencement week is given below. The shortening of the commencement season, last year, by one day, makes it probable that, this year as last, a large number of alumni will remain through to the close:

June 20. Friday.—Prize Declamations by members of the Junior and Sophomore Classes.

June 22. Sunday.—Morning: Baccalureate Sermon, by President Raymond.
Evening: University Sermon, by Rev. John Rhey Thompson, D. D.

June 23. Monday.—Afternoon: Class Day Exercises.
Evening: Glee Club Concert.

June 24. Tuesday.—Morning: Meeting of the Board of Trustees at 9 A. M. Business Meeting and Anniversary of the Alumni Association. Annual Meeting of the Phi Beta Kappa Association.

Afternoon: Reunion of the Classes of 1840, '65, '75, '80, '83, and '86. Receptions at the Chapter Houses of the various College Societies.

Evening: Quinquennial Exercises of the Chi Psi Fraternity; President, Rev. John B. Gould, M. A.; Orator, Rev. William T. Worth, M. A.; Poet, Lee L. Grumbine, M. A.

June 25. Wednesday.—COMMENCEMENT DAY. Formal Exercises of Commencement at 10 A. M., in the Methodist Episcopal Church. Commencement Dinner in the Memorial Chapel at about 1:30 P. M.

June 26, 27. Thursday and Friday.—Examination of candidates for admission.

—THE—

Wesleyan University Bulletin.

MIDDLETOWN, CONN.

NOVEMBER 1ST, 1890.—No. 7.

THE first BULLETIN of the college year has again to report, as in the last two years, that the number of students in attendance is larger than ever before. The year has opened with an attendance of 253, which is an increase of 23 over last year. The Freshman class just entered numbers 77—larger by 7 than any former class. There have also been several accessions to the faculty: it now includes 26 officers and teachers, of whom all but two are regularly engaged in giving instruction. A glance at the Department Notes on a following page will show that the course of study has been widened and strengthened. The work in the department of history and political economy last year done by Professor Woodrow Wilson, has been increased and divided between two new instructors: Associate Professor Stephenson takes the history and jurisprudence, Mr. Commons the economics. A new department—the department of English Language—has been organized and placed in charge of Associate Professor Mead, who has opened classes in Anglo-Saxon and Early English. In other directions, also, the number and range of elective studies have been increased, as, for instance, in higher mathematics, philosophy, Latin, biology. It is gratifying to note, as implying a recognition of these increased advantages, that there are this year 13 graduate students, pursuing regularly assigned courses of study. Ten of these are members of the last graduating class. Several of them intend to complete courses of study, in residence, for the Master's degree. It may be mentioned that, at the last Commencement, the Master's degree was for the first time, conferred upon a candidate who had completed the course of graduate study in preparation for it; and that the degree so conferred was that of Master of Science, never before given here to anyone.

All these facts indicate a sure and increasing prosperity. They indicate also that the college, without departing from healthy conservative methods of instruction,

ficing the solidity of its regular four years' course of undergraduate training, is steadily growing into a true University—becoming every year more worthy of the name it bears.

Mention should also be made of the recent additions to the material facilities and conveniences of the college, most noteworthy of which is the much needed plant for steam-heating described elsewhere. How much this will increase the comfort and comeliness of life in the old North College, all alumni who once roomed there can understand.

NOTES OF THE LAST COMMENCEMENT.

TRUSTEE MEETING.—The annual meeting of the Board of Trustees of Wesleyan University was held at Middletown on Tuesday of Commencement week, thirty Trustees being present.

The present officers were re-elected for another year.

A committee consisting of D. Ward Northrop, Darius Baker, and William Rice was appointed with power to act in union with another committee appointed by the Alumni Association, in applying to the Legislature for such a change in the charter of the University as will allow Alumni to vote *in absentia* on the election of Alumni Trustees.

The President of the University was requested to issue an appeal to the owners of perpetual scholarships, or life scholarships, to surrender them to the University as a contribution to its endowment funds.

Professor Rice was granted leave of absence with continuance of salary for the college year 1892-1893, and the present arrangement regarding the leave of absence of Professor Atwater at Washington was continued.

The Committee on the Change of Name of the University was continued for another year. The committee consists of James M. Buckley, Cyrus D. Foss, Stephen H. Olin, George G. Reynolds, Wm. M. Ingraham, and D. Ward Northrop.

A committee was appointed with power to arrange for the immediate introduction of steam heat into the college buildings from a single central plant, for the introduction of electric light into such buildings as the committee might see fit, and for the improvement of the sanitary accommodations of the buildings; the whole to be completed as speedily as possible, and at an expense not exceeding \$25,000. [See later notice in this BULLETIN.]

The committees on revision of the by-laws and on the provision of more convenient exits from the upper chapel were continued for another year, and the Executive Committee and the Committees on Finance, Library, Apparatus, and Board of Instruction were re-elected.

The Trustees whose term of office would expire in 1891 were re-elected for a period of five years from that date, and Hon. Daniel Ayres, M. D., LL. D.,

was elected to fill the vacancy caused by the resignation of John D. Stowick, whose term of office would expire in 1895.

The following appointments in the Board of Instruction were made: Walter P. Bradley, Ph. D., to be Associate Professor of Chemistry; Wm. F. Mead, Ph. D., to be Associate Professor of the English Language; L. Oscar Kuhns, M. A., to be Associate Professor of Romance Languages; Wm. J. James, M. A., Tutor in Mathematics, to be Instructor in Mathematics; Karl P. Harrington, M. A., to be Tutor in Latin; Franklin H. Taylor, M. A., to be Tutor in Greek—these last two being re-appointments; James A. Hulse, B. S., to be Assistant in Physics; Charles M. Child, Ph. B., to be Assistant in Biology; A. L. Treadwell, M. S., to be Assistant in Natural History; and John L. Bridge, B. S., to be Assistant in Chemistry. [To this list the Executive Committee, by authority of the Trustees, subsequently added the following appointments: Andrew Stephenson, Ph. D., to be Associate Professor of History; John R. Commons, M. A., to be Tutor in Political and Social Science; William S. Eichelberger, B. A., to be Tutor in Mathematics and Assistant in Astronomy; and Richard W. Cooper, B. A., to be Assistant Librarian.]

A committee was ordered to aid the President in the effort to increase the endowment funds by an additional \$250,000 according to the plan initiated at the last meeting.

Thanks were extended to Hon. Joseph W. Alsop, M. D., for a gift of \$500 to aid in chemical research, and to Hon. Watson C. Squire, M. A., for an increase in the fund of the Squire Scholarship.

Professor Van Vleck was elected Vice-President of the University.

The annual payment of \$250 toward the expenses of the American School at Athens was continued, the Secretary was ordered to print the minutes of the meeting for the use of the Trustees, and the Board adjourned to meet in New York City at the call of its President.

ALUMNI ASSOCIATION.—The annual meeting of the Association was held on Tuesday of Commencement week.

D. Ward Northrop was elected a member of the Alumni Library Committee, in place of H. B. Lane, deceased.

Geo. C. Reynolds and Aug. L. Smith were re-elected Alumni Trustees of the University for five years.

The committee on the voting of absentees in the election of Alumni Trustees, reported that a conference had been held with the Trustees, but that no further action had been taken, there having been no session of the Legislature since the last meeting of the Association.

J. M. Buckley, F. D. Beattys, and W. N. Rice were appointed a committee to coöperate with the committee of the Trustees on the proposed change of name of the University, and the joint committee was requested to canvass the alumni for their opinions on the subject.

F. D. Beattys and S. V. Coffin were appointed a committee to confer, in conjunction with a member appointed by the Faculty, with a committee at the

undergraduates on the organization of the athletic interests of the University.

[The Faculty has appointed W. J. James its representative on this committee.]

FINANCIAL EXHIBIT.—The financial condition of the college at the last meeting of the Trustees, may be indicated by the following abstract of the annual exhibit of the Treasurer:

PROPERTY OF THE UNIVERSITY.

Old College Buildings and Lands, - - - - -	\$155,000 00
Observatory Hall, - - - - -	15,000 00
Gymnasium Building, - - - - -	5,000 00
Rich Hall, - - - - -	45,000 00
Memorial Chapel, - - - - -	75,000 00
Orange Judd Hall, - - - - -	105,000 00
Scientific Instruments and Apparatus, - - - - -	27,550 00
Natural History Museum, - - - - -	33,480 00
Library, - - - - -	45,000 00
Organ, Furniture, and other Fixtures, - - - - -	3,600 00
Invested Endowment Funds, exclusive of the Seney Scholarships, - - - - -	1,006,917 12
Seney Scholarship Fund, - - - - -	100,000 00
	\$1,616,547 12

In addition to which nearly \$100,000 has been subscribed towards the new Endowment Fund.

The income and expenditures for the college year 1889-90, were as follows:

INCOME.

From rents and invested funds, - - - - -	\$39,662 13
From students' bills, including coal, gas, etc., - - - - -	15,679 80
Total Receipts for the year, - - - - -	\$55,341 93

EXPENDITURES.

Salaries, - - - - -	\$39,650 00
Coal, gas, water, - - - - -	2,672 39
Repairs, - - - - -	3,635 04
Insurance, - - - - -	95 63
Janitorial Service, Labor, - - - - -	2,708 70
Expenses of House for Women Students, - - - - -	2,246 12
Advertising, Postage, Stationery, Catalogues, Printing, - - - - -	1,794 94
Other Expenses, - - - - -	5,348 02
Total Expenditures for the year, - - - - -	\$58,150 84

As will be seen from the above statement, the expenditures of the year exceeded the income by \$2,808.91. This deficit, however, had been anticipated, and was more than met by subscriptions from the Trustees, to the amount of \$3,750.

The above exhibit does not include receipts and disbursements on the Seney Scholarship Fund, nor on the Alumni Library Fund. The income from the Seney Scholarship Fund amounted last year to \$5,000; the income from the Library Fund to \$1,133.60.

RECENT ADDITIONS TO THE FACULTY.

William Edward Mead, elected Associate Professor of the English language, is a graduate of Wesleyan in the class of 1881. The year after his graduation he remained at Wesleyan as a graduate student and assistant librarian. From 1882 to 1887, with the exception of intervals of travel and study in Europe, he was engaged in teaching, first in Ansonia, and later as vice-principal and then principal of the High School at Troy, N. Y. In 1887, he entered the University of Leipzig for the purpose of studying Anglo-Saxon and Germanic Philology. In 1889 he received the degree of Ph. D., *magna cum laude*, from Leipzig. After taking his degree, he spent one semester in further study at Berlin. For several months he was at the École des Chartes in Paris, studying paleography and the Romance languages, and engaged in researches at the Bibliothèque Nationale on the French manuscript sources of the Romance of Merlin, for the Early English Text Society. In 1890 he went to London and studied in the British Museum and the Library of the Inner Temple. Here he prepared for publication by the Early English Text Society a double text of Robert of Brunne's Chronicle, using in preparation the two existing manuscripts, one of which has never been published. In addition to several articles in the Academy (Boston), he has published his university thesis, entitled, "The Versification of Pope in its Relations to the Seventeenth Century."

Andrew Stephenson is a graduate of DePauw University, Ind., in the class of 1882. The following year he was principal of the public schools at Sparland, Ill. In the spring of 1884 he was appointed to the professorship of Latin and Greek at the Upper Iowa University. This position he filled until 1888. In the fall of that year he entered the Johns Hopkins University as a student in history and jurisprudence. From that institution he received the degree of Ph. D., in June, 1890. The subject of his graduating thesis was, "A History of the Public Lands and Agrarian Laws of the Roman Republic." This is to be published during the present year in the Johns Hopkins Historical Studies.

William S. Eichelberger, elected tutor in mathematics and assistant in astronomy, received the degree of B. A. from Johns Hopkins University in 1886. The following three years he spent at the same institution as a graduate scholar, fellow in mathematics, and fellow by courtesy, during which time he devoted himself chiefly to the study of mathematics and astronomy. In September, 1889, he was appointed assistant in the Nautical Almanac Office, Washington, D. C., which place he resigned to accept his present position.

John R. Commons, elected tutor in political economy, received the degree of B. A. from Oberlin College in 1888. Two years later he received the degree of M. A. from the same institution. During the last two years he has studied at the Johns Hopkins University in the department of history and political economy, his special work being in the field of economics.

DEPARTMENT NOTES.

PHILOSOPHY.—The new elective courses announced in the last BULLETIN have been added to the work of the Senior year, and are now being carried on.

1. The course in Theism is given by President Raymond, and occupies one hour a week. It begins with an analysis of religious phenomena, and by the inductive method seeks to find an interpretation for them. The philosophical theories advanced by the various schools are tested by their adequacy to explain the facts. The course is conducted by lectures and discussions, with special study of selections from different authorities.

2. Course V., selections from leading modern philosophers, given by Professor Armstrong and occupying one hour a week, is intended for somewhat advanced students. Only those who take IV. Philosophy are eligible for membership. The plan of the course includes study of the philosophical masterpieces in the original text or translations, collateral reading, discussions, essays, etc. The course this year will be on the period from Descartes to Kant, and will be based on such works as the following: Veitch's *Method, Meditations, and Selections from the Principles of Descartes*, Locke's *Essay concerning Human Understanding*, Fraser's *Selections from Berkeley*, Hume's *Inquiry concerning Human Understanding*, Kant's *Prolegomena*.

Graduate Instruction.—The work of the graduate students in the department consists this year chiefly of reading courses under the direction and supervision of the professor in charge. The subjects considered are the introduction to philosophy and advanced psychology. The distinctively graduate work is done for the most part in the latter field.

LATIN.—A Latin Seminary, led by the professor in charge and holding sessions of two hours each twice a week in its own room adjoining the Latin classroom, has been established. The work for the present year consists in a critical study of the life and the most important poems of Catullus, leaving untouched no questions of textual or exegetical interest. The method followed is substantially that of the "Seminar" in the German Universities, and the members of the seminary are students who have already taken all the required and some of the elective courses in the department, and who are judged by the leader to be fitted to undertake this advanced work.

In addition to this most significant advance in method and character of work, two briefer elective courses have been established, one in Roman topography, illustrated by photographs, engravings, and lantern-slides, and one in Latin prose composition, for the especial study of the theory of Latin rhetoric. The former is conducted the present year by Mr. Harrington, and the latter by Professor Merrill.

ENGLISH.—The department of Rhetoric and English Literature has been divided into the department of English Literature, Professor Winchester, and the department of English Language, Associate Professor Mead. The written rhetorical exercises of the upper classes are divided between these two departments; those of the Senior class being assigned to the department of English Literature, and

those of the Junior and Sophomore classes to the department of English Language.

ENGLISH LITERATURE.—The Junior elective class in English literature will meet hereafter three times a week instead of five times a fortnight as heretofore; the course of study will not be changed, but the extra time thus gained will be used in fuller lectures and discussions upon some of the most important periods of our literature.

Graduate Instruction.—Provision is made for special courses of reading and research under the direction of the professor of the department, with conferences and examinations.

ENGLISH LANGUAGE.—*Anglo-Saxon and Old English.*—Anglo-Saxon and Old English alternate with each other in succeeding years. During the current year Anglo-Saxon alone will be taken up. The text-books are Sweet's *Anglo-Saxon Primer* and *Anglo-Saxon Reader*. Anglo-Saxon texts for collateral reading will be selected from the publications of the Early English Text Society and from Ginn and Company's *Library of Anglo-Saxon Poetry*. As additional collateral reading, York-Powell's *Early England*, Freeman's *Old English History*, and Lounsbury's *History of the English Language* are recommended. Class drill in etymology and historical grammar will be a frequent exercise. The history of the literature will be treated chiefly in lectures.

The elective course in Old English will be given in 1891-92. The period to be studied extends from Layamon to the imitators of Chaucer. Proportionally more attention will be given to the development of the literature than is possible in the early study of Anglo-Saxon.

Rhetoric and Rhetorical Exercises.—The Sophomore class in rhetoric meets three times a week, instead of five times a fortnight as heretofore. Each member of the class is required to present every week an original written exercise more or less directly illustrating the rhetorical principles under consideration in the class at that time; and the third recitation hour of the week is occupied in the criticism and discussion of these exercises. In view of this increase in the amount of required writing, the number of formal essays required in the year has been reduced from nine to six.

The number of essays required from the Juniors has also been reduced from nine to seven. Of these seven, however, two will be somewhat more extended and carefully prepared papers than the rest. It is expected that these two essays will in most cases embody some results of the reading and research of the student in one of his regular studies; the subject must be chosen, and be approved by the professor, at least two months before the essays are presented.

ELOCUTION.—Provision has been made that, in the future, every member of the Senior class who elects "orations" shall receive individual criticism and instruction from the professor of the department.

The number of required declamations has been reduced, in the Junior year to six and in the Sophomore year to ten, partly in order that the professor of the department may have time for the work with Seniors mentioned above, and partly in order that he may be able to give more individual attention to the selection and delivery of the declamations in those years.

GERMAN.—The beginning class in German has grown too large to be taught in one division with convenience to the instructor and the best results to the students. It has, therefore, been divided into two sections, of which the first recites in the morning and the second in the afternoon. In this way it is hoped that the work of the year can be made more satisfactory, because more thorough.

The second-year class in German is now reading Schiller's *Maria Stuart*. Systematic sight readings will be kept up throughout the year. In other respects the work of this class will be the same as last year.

A fourth-year course in German is given this year for the first time in the history of the college. The year will be devoted mainly to a careful study of Goethe. The class will read both parts of *Faust*, and a careful selection of Goethe's lyrics will be assigned for collateral reading. Eight or ten lectures will be given in connection with the course.

The third-year course will be omitted this year.

ROMANCE LANGUAGES.—I. *French*.—This course is practically the same as last year, but reading will be taken up much earlier in order to carry on translation and grammatical work side by side as soon as possible. In addition to the regular work, the class will be divided into small sections for systematic personal drill in pronunciation.

II. *French*.—This course differs materially from that of last year. The main object is to read large quantities of modern French—at least 1,000 pages,—and to pursue the study of advanced grammar. During the second half-year a course in French composition will be given. A voluntary class in French conversation has been formed, meeting twice a week. Later in the year informal lectures in French will be given on various topics.

III. *French*.—The object of this course is mainly literary. The present year the works of the chief writers of the romantic school will be studied. In addition to the regular work of recitation, collateral readings will be given to various members of the class, to be reported upon before the class.

I. *Italian*.—The aim of this course will be to enable the students to read the language with ease and rapidity. To this end, after a short study of the grammar, easy prose will be taken up, and during the year from 300 to 400 pages will be read, part of which will be read at sight.

Graduate instruction is given this year in the department. The study consists in the reading of the works of the chief writers of the 19th century under the direction of the professor of the department.

HISTORY.—I. In the Junior elective course, instead of the general history of England and France, the constitutional history of England will be made the basis of the entire course, with parallel readings in the general histories of France and other European countries for the purpose of illustration and comparison.

2. In addition to the regular work in history as stated in the college catalogue for 1889-90, an elective course in Roman jurisprudence is offered to Juniors and Seniors. The general history of Roman law will be studied during the first

half of the year. Muirhead's *Roman Law* will be used as the text-book. The latter half of the year will be given to a somewhat careful study and comparison of the Code of Gaius and the Institutes of Justinian, with lectures upon the influence of Roman law on the various European codes.

POLITICAL ECONOMY.—The work required of Seniors in the elements of political economy extends through the year, two hours a week, instead of through the half-year, four hours a week, as heretofore.

Finance.—There has been added a course in finance, two hours a week, extending through the year, elective for Seniors. The work includes the general subject of the income and expenditures of government, local, state, and national, a historical sketch of the development of modern finance, and consideration of present problems. An essay on local taxation is required of each member of the class. The course is conducted by means of lectures and conferences, supplemented with work in Ely's *Taxation in American States and Cities*, and Adams' *Public Debt*.

Social Science.—A new elective in social science is offered to Seniors. One hour a week through the year. Lectures are given on the scope of sociology, introductory to the special consideration of such topics as charities, prisons, education, the family, etc. Collateral readings are also required.

MATHEMATICS AND ASTRONOMY.—The course in analytical mechanics is given this year by lectures based on Sturm's *Cours de Mécanique*. The special work of candidates for honors in this department will be in this subject.

The following elective courses have been added to the work of the department in mathematics.—1. A course of one hour a week on the application of trigonometry to surveying, navigation, and the elementary problems in astronomy. It is open to Classical and Latin-Scientific Sophomores and Scientific Freshmen.

2. A course of three hours a week in differential equations, open to Seniors.

3. A course of three hours a week in the theory of equations and analytical geometry of three dimensions, open to Juniors. This course is based on Burnside and Panton's *Theory of Equations*, and Frost's *Solid Geometry*.

Graduate Instruction.—The course of graduate instruction will this year consist of readings in theoretical astronomy, with frequent conferences with the professor in charge, and of work in the astronomical observatory.

PHYSICS.—An elective course of one hour a week in problems in physics has been added this year to the courses hitherto given in physics. It is open to Sophomores and will be required hereafter of those who desire to elect practical physics. This course is designed to be supplementary to the required *Seminarium in Physics*, especial attention being given to the solution of problems.

The work in practical physics has been moved almost entirely to the ground floor of Observatory Hall, where the physical laboratory now occupies some rooms. Among the pieces of apparatus recently added, or to be added this year, are a heliostat by Brashear, Mascart's quadrant electrometer, resistance boxes by Queen & Co., Weston's ammeter and voltmeter, and a complete outfit for a photometric chamber.

CHEMISTRY.—*Laboratory for Elementary Chemistry.*—For the laboratory work of the required course in general chemistry, there will soon be fitted up a large room in the basement of Judd Hall, with the needed desk room and apparatus. The complete separation of students in this course from those more advanced, together with the easy access to the store and apparatus room which the location will afford, will, it is believed, not only facilitate the work of the students, but materially diminish that of the instructors in charge.

New Elective in Theoretical Chemistry.—A new course of lectures by Professor Bradley upon theoretical chemistry is now offered. It is intended primarily for the discussion of the experimental considerations upon which the theory of the atom and molecule is based. Although designed especially to meet the needs of graduate students, it is, for the present, open to all who have finished qualitative analysis.

Graduate Instruction.—In conformity with the plans outlined in the last BULLETIN, the room opening northward from the main laboratory has been furnished with desks for a limited number of graduate students, and apparatus and chemicals selected with special reference to the needs of the new work were imported during the summer. The course will, for the present year, consist of laboratory practice, supplemented by collateral reading. Only those are eligible to this course who have successfully completed all of the regular undergraduate work or a fair equivalent.

Experimental Research.—In connection with the chemical work of the Storrs Experiment Station, which is performed in the chemical laboratory of Wesleyan University, investigations are in progress upon the sources of the nitrogen of plants and the heats of combustion of organic compounds. In order that the former investigation may be extended in lines for which the resources of the State do not suffice, but which have an especial scientific importance, a gift of five hundred dollars has been made by Hon. J. W. Alsop, M. D., of Middletown. Some time since an inquiry into the amounts, costs, chemical composition and nutritive values of the food of a considerable number of people, mostly wage-workers in New England and in Canada, was made under the joint direction of Col. Carroll D. Wright, Chief of the Massachusetts Bureau of Statistics of Labor and U. S. Commissioner of Labor, and Professor Atwater. For an inquiry into the best methods for the prosecution of such a research on a more extended scale, a small appropriation has been made by the U. S. Department of Labor to be expended for work in the chemical laboratories of the college.

BIOLOGY.—At the last meeting of the Board of Trustees it was voted to employ an assistant in the department of biology. Mr. C. M. Childs, '90, was appointed to fill the position for the ensuing year.

Biological Laboratory.—The facilities for practical work in biology have been largely increased. A considerable amount of new apparatus has been purchased, including several microscopes, and various pieces of apparatus to be used in physiological experimentation. The accommodations of the laboratory proving inadequate for the large number of elective students, two rooms, known as the

museum annex and hitherto little used, have for the present been devoted to biological work. The smaller of the two is to be used for work in laboratory, and the larger for physiological experiments. The laboratories are to be open at all hours, though stated instruction is to be given only on three afternoons in the week. These changes make it possible to accommodate larger classes than heretofore, and the restrictions formerly necessary to diminish the number of elective students have been removed. To cover the expenses of the laboratory, an annual fee of five dollars will hereafter be charged those electing practical biology. The work of the present year, besides a general course in physiological experimentation, includes considerable original research. At the present time investigations are being conducted on the physiology of the nervous system in invertebrates; on the development of snakes; and on the bacteria found in crotals, studied in both their biological and chemical relations.

Botany.—The change from five hours a fortnight to three hours a week has made it desirable to modify the scope of this course. Hereafter the class will spend the first eight weeks of the fall term in studying general biology, partly by means of lectures and partly by class dissections. Later in the year the study of botany will be pursued as in previous years.

Graduate Instruction.—Several graduate students are studying in the department. The distinctively graduate work undertaken this year is as follows:

1. A course of lectures upon the senses, instincts, and intelligence of animals, two hours a week.
2. The Biological Seminary, meeting once a week to review current literature and discuss scientific questions. The work is done by both students and instructors, and consists of reviews, lectures, and discussions.

STEAM HEATING

At the last meeting of the Board of Trustees the sum of \$27,000 was appropriated for certain improvements in the college buildings. It was estimated that most of this sum would be used in the introduction of steam heat. The work was begun during the summer, but has progressed somewhat slowly. The opening of the term was postponed for two weeks in order that most of the noisy work might be finished before the grounds were occupied, and nearly all the work in the buildings was completed before college opened. A large boiler house is in process of erection at the north end of North College, and from this building steam will be conducted to all the buildings, heating all rooms, including the students' rooms, class rooms, laboratories, observatory, etc. This will make available for class purposes several rooms which formerly could not be properly heated. The boilers are to be underground, but the boiler house is to be a building of considerable size and will contain a number of rooms. There will be a dynamo room, in contemplation of the introduction of electric lighting and of work in electrical engineering in the near future. There will also be in it a carpenter's room, some boiler rooms,

and bath rooms. The work of the steam fitting is now nearly completed and the construction of the boiler house is rapidly progressing. Though the work will not be completed as soon as was hoped, it is expected that by December it will be so near completion as to be in condition for use.

RECENT GIFTS.

The raising of \$250,000 to add to the endowment funds of the University according to the plan reported in the last BULLETIN is making gratifying progress, and it is expected that the desired sum will speedily be reached.

By the will of the late Mrs. Celesta J. McIntosh of East Hartford, Conn., the University has lately come into the immediate possession of one-half of her residuary estate, and will inherit the remaining one-half upon the death of a single heir. The entire estate amounts in value to nearly \$24,000.

The Hon. Watson C. Squire, '59, U. S. Senator from Washington, who is the donor of the Squire Scholarship fund, has so far increased his former gift that the annual proceeds now represent the income of \$5,000.

As indicated in the Department Notes, Dr. Joseph W. Alsop, of Middletown, has given the sum of \$500 to aid in chemical research the present year.

NEW ENGLAND ASSOCIATION OF COLLEGE PRESIDENTS.

This organization will hold its annual meeting in Middletown, on Thursday and Friday, November 6th and 7th. It is composed of the President and one representative from the faculty of each of the principal colleges of New England.

CALENDAR.

1890.

Sept. 25, Thursday, 9:00 A. M.,—First Half-year began.

Nov. 27, Thursday,—Thanksgiving Day.

Dec. 23, Tuesday, 5:00 P. M.,—Christmas Recess will begin.

1891.

Jan. 6, Tuesday, 7:50 A. M.,—Christmas Recess will end.

Jan. 20, Thursday,—Day of Prayer for Colleges.

Feb. 9 - Feb. 14,—Midyear Examinations.

Feb. 16, Monday,—Second Half-year will begin.

Mar. 25, Wednesday, 11 A. M.,—Easter Recess will begin.

Mar. 27, —Good Friday.

Mar. 29, —Easter Sunday.

Apr. 2, Thursday, 7:50 A. M.,—Easter Recess will end.

June 24, Wednesday,—Commencement Day.

—THE—
Wesleyan University Bulletin.
MIDDLETOWN, CONN.

MAY 30TH, 1891.—No. 8.

WITH this number the BULLETIN completes its fourth year. It may not be uninteresting to note a few facts that show the growth of the college in various ways during these four years. When the first BULLETIN was issued, the number of students enrolled in the catalogue was one hundred and ninety, now it is two hundred and fifty. And this increase has been regular and steady from year to year.

Then, the faculty numbered nineteen; now, it numbers twenty-six, or, if we include the associate professor in physics just elected, twenty-seven.

The total property of the University, according to the report of the Treasurer in June of 1887, was valued at \$1,170,482.33. The report to be rendered next month will show the whole value of the college property at present to be about \$1,520,000; or, if we include the Fayerweather bequest and one or two smaller gifts now in process of transfer to the treasury, the amount reaches nearly \$1,700,000. And to this sum, if we are to represent fairly the growth of the college funds, should be added subscriptions to the endowment made within the last two years, but not yet paid in: these subscriptions amount to some \$65,000.

And this large increase, it will be noted, is almost entirely in productive endowment funds. In 1887, the annual expenditures of the college were about \$54,000, and the receipts were insufficient to meet this sum by about \$3,000. Now the annual expenditures are about \$63,000, and are nearly or quite covered by the annual income.

The interior history of the college shows corresponding growth. Associate Professorships have been established in Romance Languages, English Language, Chemistry, and Physics. Additional instructors have also been employed in the departments of Economics and Biology. This increase in teaching force has made it possible to widen the range of elective studies and to improve the methods of instruction in various departments. Courses of lectures have been arranged exclusively for graduate students, and schemes of work laid out which shall lead to the degree of M. A.—now given only upon examination.

All this is no unsatisfactory record for four years—the period of residence of a single college class. And it is believed that such a record implies growth of other kinds which cannot be so definitely measured—growth in methods, scholarly temper, and ideals. To be sure, there are needs enough yet. The first number of the BULLETIN specified two that still remain unsupplied—a new gymnasium and an enlargement of the library fund. But there is reason to hope that we are now in sight of both; and it is to be remembered that the only healthy condition of a growing institution is that of ever-growing need met by ever-growing supply.

TRUSTEE MEETING.

The adjourned annual meeting of the Trustees of Wesleyan University was held in New York City, March 20, 1891, with twenty-five members present.

The recommendation of the President's Report, that on account of radical changes in the methods of instruction and examination the appointment of the committee known as the "Senior Examination Committee" be hereafter discontinued, was adopted.

The recommendation was unanimously adopted that the Chair of Philosophy be named, in honor of Rev. Wm. Griffin, D. D., the "William Griffin Professorship of Philosophy."

The Department of Physics was divided, and Edward B. Rosa was made Associate Professor for a period of three years.

Mr. William J. James, Instructor in Mathematics the present year, was appointed Librarian.

One of the "Committee on the Introduction of Steam Heat" having generously borne the increased expense—already amounting to several thousand dollars above the estimated cost—the following resolution was unanimously adopted by a rising vote:

"*Resolved*, That the thanks of this Board be tendered to Mr. John E.

Andrus for his generous contributions toward the extra cost of steam-heating and sanitary improvements at the College."

The Board adopted a suitable minute concerning the late Charles C. North, M. A., a trustee of the College since 1864.

A committee, consisting of S. H. Olin, Dr. A. S. Hunt, and Mark Hoyt, was appointed to consider the disposition to be made of the gift of \$50,000 recently made to the University by the executors and legatees of the Fayerweather estate.

The recommendation of the President and faculty in regard to the "Squire Scholarship" was adopted. A statement of the new conditions will be found elsewhere in this BULLETIN.

RECENT GIFTS.

The most notable gift of the present college year is in the form of a bequest from the late D. B. Fayerweather of New York. Among the many generous provisions of his will was one giving \$100,000 to Wesleyan University. Mr. Fayerweather's executors, in dividing the residue of the estate, gave an additional sum of \$50,000 to Wesleyan. It is understood that the estate cannot be settled for at least two years. The Trustees have not yet decided for what purpose this money is to be used.

The McIntosh estate, mentioned in the last BULLETIN, has been turned over to the Trustees, who are responsible for an annuity on half the estate during the lifetime of a single heir.

Mr. John E. Andrus has generously contributed several thousand dollars toward the completion of the improvements in steam-heating and sanitary arrangements.

VOTING BY ABSENTEES IN ELECTION OF TRUSTEES BY THE ALUMNI.

In 1885, the Alumni Association adopted a resolution requesting the Trustees to secure from the Legislature such a change in the Charter as would allow those alumni who cannot be present at the meeting of the Alumni Association to take part in the election of Trustees. The plan proposed contemplated a preliminary ballot for the nomination of candidates, and a final ballot in which the selection should be made from among those receiving the largest numbers of votes in the preliminary ballot. It was, however, proposed that the amendment to the Charter should not include any provisions of detail, but should simply give the Trustees unlimited power to prescribe regulations for the voting of the Alumni. This mode of procedure would allow modifications in the details to be made as experience might suggest, without the necessity of further appeal to the Legislature.

In 1889, the subject was again brought up in the Alumni Association, and a Committee, consisting of Hon. W. T. Elmer, Rev. J. Purlman, D. D., and

Prof. W. N. Rice, was appointed, with instructions to secure, if practicable, the adoption of the proposed plan.

The Committee of the Alumni appeared before the Trustees at the session in 1890, and presented the petition of the Alumni. The Trustees voted approval of the general plan, and appointed a Committee, consisting of Hon. D. W. Northrop, Rev. William Rice, D. D., and Hon. Darius Baker, to secure from the Legislature the desired change of the charter.

It was the intention of the two Committees to unite in an application to the Legislature for the desired amendment, at the session of 1891. But the anomalous condition of the Connecticut state government has rendered it impossible to accomplish anything. The matter must therefore remain in *statu quo* until by some process the State of Connecticut is able to develop a functional Legislature.

PROPOSED CHANGE OF NAME OF THE INSTITUTION.

The name of the Institution has been, for many years, regarded by a considerable body of the Alumni as objectionable for various reasons. The project of a change has been repeatedly discussed in local Alumni Clubs and in the Alumni Association. At the meeting of the Alumni Association in 1890, it was determined to make a thorough canvass of the Alumni, for the purpose of ascertaining their views on the question. A committee was accordingly appointed, consisting of Rev. J. M. Buckley, D. D., Prof. W. N. Rice, and F. D. Beattys, to correspond with the Alumni. Their circular of inquiry was issued early in April. The very large number of answers promptly received is a gratifying indication of the interest taken by the alumni in everything affecting the welfare of Alma Mater.

The whole number of votes thus far received is 652, of which 341 are in favor of some change, 311 opposed to any change.

The distribution of the vote by decades of classes may be interesting. It may be tabulated as follows:—

1834-40,	-	-	-	-	-	-	Yes, 10; No, 16.
1841-50,	-	-	-	-	-	-	Yes, 23; No, 23.
1851-60,	-	-	-	-	-	-	Yes, 47; No, 50.
1861-70,	-	-	-	-	-	-	Yes, 62; No, 55.
1871-80,	-	-	-	-	-	-	Yes, 88; No, 65.
1881-90,	-	-	-	-	-	-	Yes, 111; No, 102.

Of names suggested as desirable, in case a change should be made, Middletown appears to be the most popular. There are 88 votes for Middletown College, 62 for Middletown University, and 26 for Middletown, without any expression in regard to the other part of the name. There are 47 votes for Wesley College or Wesley University. Olin, Fisk, Wilbur Fisk, and Fisk-Olin are various forms of names proposed as memorial of the early history of the College; while Connecticut and New England are favored by some who desire a

geographical designation. Some desire to have the Institution named after some one of its prominent benefactors, as Judd, Rich, Seney, Ayres. Others desire to honor some potential benefactor who shall give or bequeath a good round million. It should be said that some of those counted above as voting for Middletown or Wesley, vote No on the main question, but nevertheless express a preference for the names designated, in case a change should be made.

MIDDLETOWN SCIENTIFIC ASSOCIATION.

The following meetings of the Middletown Scientific Association have been held during the year:

Nov. 11.—The Laboradorite rocks of the Adirondacks; Wm. North Rice.

Some functions of the central nervous system of the Myriopods; C. M. Child.

Dec. 9.—The fermentations of milk and their prevention; H. W. Conn.

Jan. 13.—Aluminium; W. P. Bradley.

Feb. 10.—Beet Sugar; Gustave Gehring.

March 10.—Explanation and Illustration of the Phonograph; Wm. North Rice. Notes on recent progress in Physiological Chemistry; W. O. Atwater.

April 14.—Koenig's experiments on Beats and Timbre; M. B. Crawford. Is Alcohol a food? H. W. Conn.

May 19.—Astronomical photography; J. M. Van Vleck. Microscopic objects, illustrated by the lantern; A. L. Treadwell.

JUNIOR EXHIBITION.

In order to avoid the inconveniences that have hitherto attended the holding of the Junior Exhibition at the end of the second term, immediately after a series of severe examinations, the Exhibition will be held for the future after the Easter Recess. This year its date was April 16th. The first prize was awarded to Everett Hallerton Scott, whose subject was "A Puritan Ideal," and the second to William Henry Kidd, whose subject was "The Relation of Labor and Law."

The members of the committee of award were Charles D. Hine, B. A., Rev. Melville B. Chapman, D. D., and Rev. William G. Fennell, M. A.

COLLEGE LECTURES.

The following lectures have been delivered before the College during the present year:

Nov. 11.—Rev. Samuel W. Dyke, D. D. Subject—Divorce.

Jan. 6.—Prof. Borden P. Bowne of Boston University. Subject—Moralization of Life.

Feb. 17.—W. F. Whitcher, Managing Editor of the *Boston Traveller*. Subject—The Newspaper: the Ideal and the Actual; Its Influence and Its Mission.

Feb. 26.—Prof. Geo. L. Fox, Head-master of the Hopkins Grammar School of New Haven. Subject—The Great Public Schools of England.

YOUNG MEN'S CHRISTIAN ASSOCIATION.

Two lectures have been given, under the auspices of the Young Men's Christian Association, on the evenings of May 12th and 13th, by Rev. J. W. Mendenhall, D. D., Editor of the *Methodist Review*. His subjects were, Some Characteristics of the Higher Criticism, and, The Three Great Biblical Problems.

LECTURES AND PUBLICATIONS BY THE FACULTY.

By Professor Van Benschoten.—A Winter in Athens. An address at Tilton Academy and elsewhere.

By Professor Rice.—The Place of Natural Science in the Educational Course. An address at Saratoga Springs before the American Institute of Instruction. Abstract published in the volume of Proceedings of the Institute.

The Degree of Probability of Scientific Belief. An address before the Yale Philosophical Club. Published in the *New Englander and Yale Review*, January, 1891.

The Credibility of the Resurrection of Jesus. An address before the New England Southern Conference.

The Sceptical and the Dogmatic Tendency in Christian Thought. An address before the Oxford Club of Yale University.

In addition to the above, he has published a number of short articles, among which may be noticed a review of Jackman's Outlines of Natural Science for Common Schools, appearing in the May number of the *Educational Review*, and the first of a series of Scientific Notes, appearing in the *Zion's Herald* for April 22d.

By Professor Atwater.—On the Acquisition of Atmospheric Nitrogen by Plants. Published in the *American Chemical Journal*, vols. 12 and 13.

On the Heats of Combustion of certain Organic Compounds. A paper read before the Chemical Section of the American Association for the Advancement of Science, in August, 1890.

The Reports of the Office of Experiment Stations of the U. S. Department of Agriculture have been edited under the direction of Professor Atwater.

By Professor Winchester.—In addition to a number of other lectures given in various places, Professor Winchester has given a course of eight lectures on the Literature of the Period of Queen Anne, at Johns Hopkins University, and a series of six lectures on the Poetry of the Nineteenth Century, before the Northwestern University at Evanston, Ill.

He has published in *Zion's Herald*, April 29th, 1891, a paper on "Some Recent Biography." This is the first of a series of Literary Notes to be issued in that journal.

By Professor Conn.—Weismann and the Theory of Heredity. An address before the Cold Spring Laboratory.

Bacteria. A lecture before the State Dairy Association at Hartford, and elsewhere.

The Fermentations of Milk. A lecture before the State Board of Agriculture. Published in the Report of the Board for 1890, and in *Science*, May 15, 1891.

The Ripening of Cream. Published in the Annual Report of the Storrs School Experiment Station for 1890.

A Micrococcus of Bitter Milk. Published in the Annual Report of the Storrs School Experiment Station for 1890.

By Professor Mead.—The Arthurian Romances. An address delivered in the lecture-room of the North Church in Middletown, Jan. 27th, 1891.

The Everyday Work of the École des Chartes. Published in the *Academy*, Boston, December, 1890.

By Professor Armstrong.—The New Psychology. Published in *The Independent* for November 20th, 1890.

By Mr. Treadwell.—The Souring of Milk during Thunderstorms. Published in *Science*, March 27th, 1891.

On the Development of the Male Copulatory Organs in Snakes. Published in the *American Naturalist* for April, 1891.

The Annual Report of the Storrs School Experiment Station for 1890 contains a number of papers embodying results of work done in the chemical laboratory at Wesleyan. Among them may be mentioned the following:

By C. D. Woods.—On Sources of Error in Field Sampling of Crops for Analysis.

By H. B. Gibson.—On the Schulze-Tiemann Method of Estimating Nitric Acid. Investigations with the Calorimeter.

GRADUATE INSTRUCTION.

During the present year the college has, for the first time, offered specific graduate courses of instruction. The success of this new line of work has been very promising. Twelve graduate students, most of them graduates of Wesleyan, have been in attendance in college during the year, and have pursued courses of study in the departments of Mathematics and Astronomy, Chemistry, Physics, Philosophy, English, French, Biology, and Geology. The work that has been done by these students has consisted partly in elective undergraduate courses, but largely of distinctly graduate work. The latter has comprised special courses of graduate lectures, advanced practical work in the laboratories or field work under the personal direction of instructors, special courses of reading with personal conference, and lectures given by the students before classes. Several lines of research have been undertaken, the results of which either have been published or will appear later in the form of contributions to scientific periodicals.

The line of work thus started will be continued. The departments which have offered specific graduate instruction during the present year are prepared to renew the offer, and the departments of English and Physics, which have hitherto not been in condition to undertake such work, will do so in the coming year.

DEPARTMENT NOTES.

GEOLOGY.—*Geological Survey*.—A study of the Triassic region of Connecticut has been undertaken by Prof. W. M. Davis, of Harvard University, under the auspices of the U. S. Geological Survey. It is expected that the work on the Middletown sheet of the map, including an area measuring fifteen minutes in latitude and longitude, will be done by Professor Rice, with the assistance of a few recent graduates and advanced students. The most of the work is to be accomplished during the next summer vacation.

II. *Geology*.—The advanced course in Geology will probably be omitted in the year 1892-3, on account of the absence of Professor Rice.

PHYSICS.—During the year about eight hundred dollars' worth of apparatus has been purchased, mostly in the departments of Light and Electricity.

The work of the department will be considerably enlarged next year, this enlargement being made possible by the appointment of Mr. E. B. Rosa as Associate Professor of Physics. The additional courses in Physics for next year have not been definitely decided upon, but will include some more advanced electives than have hitherto been offered, especially in the department of Electricity, and probably also a small amount of elective practical work in Sophomore year.

GREEK.—A new elective, of one hour a week, will be introduced in the Sophomore year; subject, Lectures on Greek Life.

In the senior elective there will be readings from several lyric poets.

A valuable addition to the work of the department will be the seminary room, with its special library. Mr. Bowles Colgate, a trustee of the college, has given a sum of money for the purchase of books.

ROMANCE LANGUAGES.—III. *French*.—The work in this course for next year will differ somewhat from that of the present year, and will be as follows: During the first half-year the literature of the 17th century will be studied. Selections from the works of Corneille, Racine, Molière, Boileau, La Fontaine, Pascal, and Madame de Sévigné will be prepared for class; there will be, however, no translation made, but questions on subject matter and criticism will be put and answered in French. Further, each member of the class will select one of the above authors for more thorough study, and will read the chief works of the author in question, and prepare from time to time articles to be read before the class. During the second half-year the same kind of work will be done in the literature of the 19th century, when the works of Chateaubriand, Lamartine, de Musset, Victor Hugo, Béranger, and de Vigny will be studied. Throughout the year lectures upon the language and literature will be delivered in French, upon which the student will be expected to take notes. In addition to the above, there will be daily practice in translating into French standard English authors.

Conversation Class.—It is purposed to make this class a regular elective next year. It will count as one hour a week, but may meet oftener if so desired.

Hereafter those who desire to elect III. French must have previously taken this elective.

Italian.—The elementary course in Italian will be repeated next year. During the present year the class will have read between five and six hundred pages of modern prose. In addition to this, the Instructor has read and explained the first canto of Tasso's *Gerusalemme Liberata*, and most of Dante's *Inferno*.

GERMAN.—Students who elect II. German will recite three times a week next year instead of twice a week.

ENGLISH LANGUAGE.—I. During the coming year the class in French's English Past and Present will meet once a week.

The Freshman class in Rhetoric will meet once a fortnight. The text-book will be Nichol's *English Composition* (Macmillan's Ed.).

2. The text-book in Rhetoric for the Sophomore class next year will be Hill's *Principles of Rhetoric*.

3. Juniors will write, as heretofore, essays on subjects of their own selection; but as an alternative to the course of seven essays now required, they will be allowed to write a series of six essays, four of which must discuss a subject closely related to some department of college work.

4. A new elective, of one hour a week, will be offered next year in *Beowulf* to Seniors who have completed the Junior course in Anglo-Saxon.

5. For the use of the classes in Senior English Literature and Old English, one of the college rooms will be reserved and fitted up as a reading-room. All books necessary for the work of the department will be there brought together in a special library and made easily accessible to the members of the classes.

ENGLISH LITERATURE.—A new elective in *The Elements of Literary Criticism* will be offered in this department next year. The study will include a consideration of literary standards, both in form and matter, of the literary use of the emotions and the imagination, of the relations of the literary art to morals, etc.

The class will meet once a week; instruction will be given by lectures with illustrative readings.

This elective is intended primarily for graduate students.

PHILOSOPHY.—The course in Theism will be an elective for graduate students and for Seniors who have taken Courses I., II., and III. in Philosophy.

The department expects to secure next year a room in South College, which will be fitted up and used as a private room by the smaller elective classes, graduate students, and those engaged in original research.

HISTORY.—In addition to Courses II., III., and V. of the catalogue for 1890-91, a course in *Mediæval and Modern History* is offered for the coming year. The aim of this course is to familiarize the student with the leading facts of European history, from the fall of the Western Roman Empire to the death of Napoleon. Emerton's *Introduction to the Middle Ages*, Duruy's *History of the Middle Ages*, and Stillé's *Studies in Mediæval History* will be used for class

drill in the first half-year. The latter half of the year will be devoted to the history of the 15th, 16th, 17th, and 18th centuries. In this latter part, it is probable that no text-book will be used. *Twice a week.*

This course is elective for juniors, but seniors electing Course III. are required to take this elective.

BIOLOGY.—A course of lectures on the history of bacteriology, one hour a week, will be offered next year. The course is intended for graduate students, but Seniors electing Biology will be expected to attend the lectures.

Summer Marine Laboratory.—In the summer of 1890, a Marine Laboratory of Biology was established through the influence of the Brooklyn Institute. This laboratory is located at Cold Spring Harbor, L. I., and through the kindness of the New York State Fish Commission, makes use of the fish-hatching station at that place. Professor Conn has been appointed Director of this laboratory for the coming summer, and will give instruction there during July and August. The work of the laboratory will be in a measure supplementary to that of the laboratories in Middletown, and attendance at the summer laboratory will be accepted as work for special honors. Students planning to take special honors in Biology are especially advised to spend as much of the summer as possible at the summer laboratory.

LIBRARY.—Mr. W. J. James has been elected Librarian. He is to have an assistant, and it will be possible to give more time to the work of the library than has been the case in the past. It is expected that a number of minor improvements will be made immediately, and that in the near future the rearrangement of the books, which was commenced some years ago, will be completed. The urgent need of the library is an increase of the fund for the purchase of books. The advanced courses now offered demand a great number of books on special subjects.

SENIOR EXAMINATIONS.

From the early days of the College it has been the custom to appoint annually, by the authority of the Trustees, two examining committees to inspect, one the Senior and the other the Annual Examinations. The functions of these committees have been growing much less arduous during the last decades, and the greatly changed conditions of the present day have now led the Trustees to discontinue the appointment of the Senior Committee, and for the few oral examinations heretofore conducted in their presence, written examinations will henceforth be substituted. But in view of the value to the College of placing annually before a selected number of competent and disinterested persons as full and fair a view as possible of the conduct of instruction and examination, the appointment of an Annual Examining Committee, with similar functions to those exercised within the last few years, will be continued till a more effective scheme for securing the recognized advantages of the past can be devised.

THE SQUIRE SCHOLARSHIP.

The increase in the proceeds of the Squire Scholarship fund was mentioned in the last number of this BULLETIN. The full text of the regulations concerning its award and enjoyment, passed by the Trustees at their recent meeting, are here given:

The Squire Scholarship shall be awarded, by competitive examination in Greek, to a member of the Senior Class. But the recipient of the Scholarship must pursue during the following year a course of graduate study in the Ancient Classical Languages and Literatures, which shall be approved by the Committee on Graduate Instruction; and no one shall be entitled to enter the competition who does not intend, if successful, to fulfill this condition.

The course of study required may be pursued in residence in this institution, or may be connected with travel and residence in Europe, at the option of the candidate, subject to the approval of the committee.

In case the successful candidate in the examination is prevented from fulfilling the condition of graduate study, the papers of the remaining candidates shall be re-examined, and the Scholarship shall be awarded to the highest of these candidates who may at that time be able to undertake the fulfillment of the condition, provided the absolute merit of his paper is deemed sufficient to justify such award.

In case the Scholarship shall not be awarded in any year, the income for that year shall be added to the principal of the fund.



Commencement Calendar.



- June 2.* Tuesday.—Senior Examination begins.
- June 5.* Friday.—Prize Debate and Declamation.
- June 16.* Tuesday.—Annual Examination begins.
- June 19.* Friday.—Prize Declamation.
- June 21.* Sunday Morning: Baccalaureate Sermon, by President Bradford P. Raymond, D. D., LL. D.
 Sunday Evening: University Sermon, by the Rev. Bishop Cyrus D. Foss, D. D., LL. D.
- June 22.* Monday.—Class Day.
- June 23.* Tuesday.—Reunion of the Classes of 1841, '66, '76, '81, '84, and '88.
 Tuesday Morning: Meeting of the Board of Trustees at 9 o'clock.
 Business Meeting of the Alumni Association at 10 o'clock.
 Tuesday Afternoon: Receptions of the several Literary Societies.
 Tuesday Evening: Anniversary of the Delta Kappa Epsilon Society;
 President, F. E. Barker, Esq., Class of '74; Orator, Hon. W. C. Wallace, Class of '76; Poet, Rev. Alsop Leffingwell, Class of '80.
- June 24.* The last Wednesday in June.—COMMENCEMENT.
- June 25-6.* Examination of Candidates for Admission.

VACATION OF TWELVE WEEKS.

- Sept. 17.* Fall Term begins.

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Wesleyan University Bulletin.

MIDDLETOWN, CONN.

NOVEMBER, 1891.—No. 9.

AT the beginning of the new college year we can look back upon a year of prosperity, and forward upon what gives promise of being a year of progress. The number of students this year is 264, an increase of eleven within a year, and of thirty-four within two years. The past year was marked by numerous changes in the corps of instructors, as well as in the work of various departments. The changes of the present year are also considerable. In Economics, Mr. Daniels takes the place of Mr. Commons, in Latin, Mr. Nicolson succeeds Mr. Harrington; and in Greek, Mr. Goodrich replaces Mr. Taylor. In the department of Physics, Dr. Rosa has been appointed as Associate Professor. Other changes are outlined in the Department Notes.

The temper and spirit of the college, as evidenced by the new courses offered in various departments, afford encouraging proof that the college is gradually moving in the direction of more advanced study in special lines. It is hardly necessary to remark that the development of new courses of study demands a corresponding increase in the equipment of the college. To meet this demand, some steps have already been taken. The department of Physics has been provided with rooms and apparatus at a cost of \$7,500, and additional facilities for investigation have been supplied in several other departments. Especially noteworthy, too, is the appointment of Mr. James as permanent Librarian, and the contemplated reorganization of the college library. All these facts, and many more that might be cited, give evidence that the college, in its methods and general spirit, is more and more approximating to the ideal which college

wishes to see more fully realized. It must not, however, be forgotten that although the changes mentioned above are but the natural accompaniments of increasing numbers and increasing breadth of scholarship, yet no single department, or group of departments, can be enlarged without compelling ultimately the development of all others. If the college is to be an organic whole, there can be no undue preponderance or deficiency on any side, without checking the harmonious growth of the entire organism.

NOTES OF THE LAST COMMENCEMENT.

TRUSTEE MEETING.—The more important actions of the Board of Trustees at the Annual Meeting, held at Middletown, June 23, 1891, are here noted.

The officers of the Board were re-elected for another year.

A suggestion from Orange Judd, regarding a new edition of the Alumni Record, was referred, with power, to the Faculty in conjunction with the Executive Committee.

A summary of the Annual Report of the President of the University was ordered to be printed for the use of the Trustees.

The President of the University was authorized to confer the following honorary degrees: D. D. upon Rev. Thomas J. Bissell, M. A., Rev. Geo. H. McGrew, M. A., and Rev. James Mudge, M. A.

The report of the Committee on the Change of Name of the University to the effect that they deemed any such change inexpedient was unanimously adopted.

The customary appropriation of \$250 toward the expenses of the American School at Athens was ordered.

The resident members of the Board were directed to revise the valuations of the property of the University, and report the same to the Board at its next meeting.

The sum of \$50,000, given to the University by the executors of the will of the late Daniel B. Fayerweather (in addition to the sum of \$100,000 bequeathed by the will itself), was set apart for the construction and equipment of a gymnasium, to be known as the Fayerweather Gymnasium; and the Executive Committee were authorized to obtain plans for the building, to receive further subscriptions toward its erection and maintenance, and to proceed with its construction so soon as the receipt of the funds shall, in their opinion, warrant such action; provided that at least \$10,000 shall previously be secured, in addition to the original appropriation of \$50,000.

The following Trustees were re-elected for another term of five years: Orange Judd, Andrew Longacre, James M. Buckley, Joseph S. Spinney; and the following were added to the Board: J. B. Thomas (*vice* John C. Rand, term expired), John E. Searles (*vice* Anderson Fowler, resigned), Samuel W. Bowne (*vice* Charles C. North, deceased).

The following appointments on the Board of Instruction were made: Karl P. Harrington, Tutor in Latin, to be Instructor in Latin; Frederic S. Goodrich, to be Tutor in Greek; William S. Eichelberger, to be Tutor in Mathematics and Assistant in Astronomy for a second year; Charles W. Savage, to be Assistant in Physics; Frederick A. King, to be Assistant Librarian; Charles M. Child, to be Assistant in Biology for a second year; and Frank B. Dains, to be Assistant in Chemistry.

[At the mid-year meeting of the Board, Edward B. Rosa was elected Associate Professor of Physics for three years, and William J. James, Librarian, and the Executive Committee have since appointed Frank W. Nicolson Tutor in Latin, *vice* Karl P. Harrington, Instructor, resigned, and Winthrop M. Daniels Instructor in Economics and Social Science.]

S. H. Olin, A. S. Hunt, and Mark Hoyt were appointed a Committee to act in conjunction with the Executive Committee in the matter of the Fayerweather Gymnasium.

The expenditure of \$7,500 during the next year, for electrical apparatus and necessary constructions in connection therewith, was ordered.

The usual committees were appointed, and the Board then adjourned to meet in New York City at the call of its President, or of the President of the University.

ALUMNI ASSOCIATION.—The Annual Meeting of the Association was held on Tuesday of Commencement week.

The Committee on the voting of absentees in the election of Trustees reported that the abnormal condition of Connecticut politics had rendered it impossible to secure any legislative action. The report was accepted as a report of progress, and the Committee was continued.

The Committee appointed at the previous meeting to make a canvass of the the Alumni relative to the proposed change of name of the Institution reported the result of their correspondence. An abstract of the report is given in another paragraph of this BULLETIN. It was voted unanimously that, in view of the facts reported, the Alumni Association are opposed to any change in the name of the Institution.

Rev. George H. Whitney, D. D., and Hon. Darius Baker were re-elected Trustees of the University for the term of five years.

A vote was passed declaring it to be the sense of the Alumni Association that a new gymnasium is the most pressing need of the College. The announcement of the action of the Trustees, conditionally appropriating fifty thousand dollars for that object, was received with great enthusiasm; and it was understood that during the ensuing year the work of soliciting subscriptions from the Alumni would be prosecuted with increased vigor.

THE FINANCES.—The following is an abstract of the Financial Exhibit presented by the Treasurer at the last Annual Meeting of the Trustees:—

Property of the University.

College buildings and campus, - - - -	\$400,000
Other real estate, - - - -	101,861
Scientific apparatus and collections, - - - -	61,030
Library, - - - -	45,000
Furniture (including organ in Chapel), - - - -	3,600
Invested funds, - - - -	926,844
	\$1,538,335

This does not include the Seney Scholarship Fund, amounting to \$100,000, nor the \$150,000 which will be received from the Fayerweather Estate.

Income for year 1890-1.

Students' bills, - - - -	\$16,465
Rents, and interest on investments, - - - -	53,317
Miscellaneous receipts, - - - -	1,294
	\$71,076

Expenditures.

Salaries of Faculty, - - - -	\$42,400
Expenses of Ladies' Boarding-house, - - - -	2,104
Fuel, gas, and water, - - - -	3,839
Insurance, - - - -	527
Repairs, - - - -	5,773
Laboratories, Observatory, and Museum, - - - -	3,276
Library, - - - -	1,690
Janitorial service, - - - -	3,219
Miscellaneous expenditures, - - - -	6,847
	\$69,675

RECENT ADDITIONS TO THE FACULTY.

Edward Bennett Rosa, elected Associate Professor of Physics, is a graduate of Wesleyan in the class of 1886. The two years following graduation were spent at Providence, R. I., where he taught Physics, Chemistry, and Mathematics, in the English and Classical School. In 1888, he entered Johns Hopkins University, taking Physics as a principal subject, and Mathematics and Astronomy as subsidiaries. In January, 1890, he was appointed Assistant Professor of Physics in the University of Wisconsin, where, also, he carried on experimental investigations in electricity, which subsequently formed the basis of his thesis for the doctor's degree. On his appointment as Fellow in Physics at Johns Hopkins, he returned to Baltimore in the autumn of 1890, and took the

degree of Ph. D. in June of the present year. Professor Rosa has published a Determination of the Ratio of the Electro-magnetic to the Electro-static Unit in the *London, Edinburgh, and Dublin Philosophical Magazine* and in the *American Journal of Science*; and a paper on the Specific Inductive Capacity of Electrolytes, in the *London, Edinburgh, and Dublin Philosophical Magazine*, and the *Johns Hopkins University Circular*. This latter paper is a part of his doctor's thesis, which will be published as a whole during the current year.

Winthrop More Daniels, elected Instructor in Economics and Social Science, is a graduate of Princeton College in the class of 1888. For two years after graduation he taught in the Princeton Preparatory School, and pursued graduate studies in Philosophy and History. He received the degree of M. A. from Princeton in June, 1890. The year 1890-91 he spent at the University of Leipsic in the study of History and Political Economy.

Frank Walter Nicolson, elected Tutor in Latin, is a graduate of Mt. Allison College, Sackville, N. B., in the class of 1883, where also he served as Tutor in French and English, 1883-84. In 1885 he entered the Junior Class in Harvard College, where he graduated in 1887, and received the degree of M. A. in 1888. He was Instructor in Sanskrit at Harvard in 1888-89, and Instructor in Latin, 1889-91. Mr. Nicolson has published in the *Proceedings of the American Philological Association* for 1889 and 1890, the synopses of two papers: (1) The Interpretation of Aristophanes' *Acharnians*, §49, (2) Greek Modes of Hair Cutting; and in the *Harvard Classical Studies*, Vol. II., an article on Greek and Roman Barbers. He has also published an edition of the *Phormio* of Terence, arranged for sight reading.

Frederic Samuel Goodrich, elected Tutor in Greek, is a graduate of Wesleyan in the class of 1890. The following year he spent abroad, studying Greek language and literature at the University of Berlin and the American School at Athens.

DEPARTMENT NOTES.

LATIN.—Beginning with the present year, III. Latin is elective for all who have taken I. Latin, and classical sophomores electing it may be excused from attendance upon II. Latin. The class meets three times a week and the works read are, during the first half-year, Cicero's *Ausgewählte Briefe*, von Hofmann-Andresen, and during the second half-year, the *Captivi* and *Menaechmi* of Plautus, and the *Phormio* of Terence. The course is conducted during the first half-year by Professor Merrill, and during the second by Mr. Nicolson. A similar partition of work between the two instructors is made in the case of II. Latin, but in inverse order.

IV. Latin is omitted the present year, and V. and VI. Latin given. Of these two, Professor Merrill conducts the former and Mr. Nicolson the latter.

Two courses, VIII. and IX. Latin, are given this year for the first time. The former of these, a course in Latin Prose Composition, is open to all who take

or have taken, III. Latin, and not only to those who took the briefer course in the same subject last year. Weekly exercises are held, and the class is divided on account of its size into two divisions, of which each of the instructors conducts one.

The second of the new courses consists of weekly lectures introductory to the study of the private institutions of the Romans, and is given by Professor Merrill. Both, like VIII. Latin, are elective for all who take, or have taken, III. Latin.

The Latin Seminary has been transferred from 4 S. C. to 41 N. C. The work this year is upon the general principles of Latin Epigraphy, with individual interpretations of selected inscriptions of various classes.

ENGLISH LANGUAGE.—I. During the current year, the Freshman Class in the History of the English Language meets once a week, and in Rhetoric once a fortnight.

2. In Rhetoric, Nichol's English Composition and Hill's Principles of Rhetoric are used as text-books this year.

3. The class in Old English meets this year in No. 25, North College, which has been fitted up as a reading-room, with chairs, table, lamp, and the beginnings of a department library. Written reports on topics suggested by the instructor are regularly required from members of the class.

4. The class in Beowulf—the new elective course in Anglo-Saxon—meets once a week. Each member of the class will present, at the end of the year, a thesis on some theme suggested by the class work.

ECONOMICS AND SOCIAL SCIENCE.—*Political Economy*.—Walker's Political Economy is the text-book used, and is supplemented by weekly lectures.

Finance.—Adams' Public Debts is used as an introduction to the subject. Lectures also constitute a part of the course. Besides the consideration of the fundamental principles of taxation and deficit financiering, special attention will be paid to the financial history of England and the United States, with particular regard to present problems.

Social Science and History of Economics.—A one-hour course for seniors will be given in Social Science and History of Economics, beginning after the Christmas recess. The course will consist largely of lectures, and will deal with the origin and nature of institutions considered in their social rather than in their historical aspect. The fall term will be occupied in studying the history of the development of Economics, with Ingram's sketch of Political Economy as text-book.

PHILOSOPHY.—I. The Senior Elective Course in Theism will hereafter be open to those students only who have previously elected III. Philosophy. This rule, announced in a previous BULLETIN, but not strictly followed because of the lateness of the announcement, will in the future be rigorously enforced.

2. The Sophomore Class in Logic will recite this year in two sections, instead of one, as heretofore.

3. The room No. 7, South College, has been assigned to the department, to be used by the more advanced students, as outlined in BULLETIN No. 8. It is hoped that it will soon be possible to form a departmental library, preparation for which has already been begun.

4. The department has, by special grant of funds, been enabled to secure some of the most important among the recent foreign works in the field of psychology, and thus to commence the collection of an equipment for advanced psychological work.

Two courses of psychological investigation are being carried on this year (1) An Investigation of the Imagery of American College Students, on the methods of Mr. Francis Galton; (2) An Inquiry into "Unconscious Mental Cerebration," also on the Statistical Method, as proposed by Mr. Francis Speir, Jr., of New York. Thanks are due to Mr. Speir, Professor Henry F. Osborn, of Columbia College, and Professor N. T. Ormond, of Princeton College, for assistance in the collection of data for these inquiries, and for contributions of material essential to them.

PHYSICS.—1. *Changes in Course of Study.* The required course of Sophomore year has been reduced from the equivalent of three hours a week to the equivalent of two and a half hours a week for the year. For the Sophomore elective in Problems in Physics has been substituted a course of two exercises a week in Mechanics, one exercise a week during the second and third terms being devoted to laboratory work. The Junior elective in theoretical Physics has been increased from two to three hours a week, being devoted this year to Heat and Electricity. No distinctively new courses have been introduced this year, because of the large amount of work necessary in establishing the electrical department and workshop described below. It is expected that next year advanced courses in Electricity will be offered.

2. *Electrical Laboratory and Workshop.* The Trustees, at their last annual meeting, voted an appropriation of \$7,500 for the equipment of an electrical laboratory and workshop. Accordingly, the brick building back of North College, which was known to the older alumni as a Chemical Laboratory, has been transformed into an Electrical Laboratory. As the employment of this building for this purpose is only provisional, as little money as possible has been expended in mere changes in the building, leaving as large a balance of the appropriation as possible for the purchase of apparatus, machines, and tools. The laboratory work in other branches of Physics than Electricity, is carried on in the rooms in Observatory Hall, occupied for several years by the Physical Laboratory.

Some of the principal pieces of apparatus which have been, or are shortly to be, secured for work in the Electrical Laboratory, are the following: Thomson's mirror galvanometers, Thomson's portable electrometer, Thomson's centi-ampere electrical balance, sine, tangent and astatic galvanometers, Weston's ammeters and voltmeters (two each), Cardew voltmeter, Siemens' electrodynamometer, resistance boxes from Elliott Bros. and Queen, standard ten-ohm coil from the

Cavendish Laboratory, standard condenser, induction coils by Ruhmkorff and Ritchie, Carhart's standard cell, Thomson's rheostat, Kohlrausch's bridge for the resistance of liquids, Mascart's quadrant electrometer, three Becker balances, several reading telescopes, and a storage battery consisting of 56 Julien cells.

In the new boiler-house, near the Electrical Laboratory, is located the dynamo room and workshop. An engine room has been built on the north side of the building, in which has been placed a 25-horse power Ball automatic high-speed engine, steam being furnished from a 30-horse power boiler. The following dynamos, motors, and testing apparatus have been purchased: an Edison 110-light incandescent dynamo, with indicator, ammeter, and rheostat; Edison 3-horse power motor; Edison half-horse power motor and smaller fan motor; a Westinghouse "pony" alternating current dynamo, with transformers, ammeter, Shallenberger meter, and alternating current motor; Excelsior alternating motor, and direct-reading Tachometer. To these are soon to be added a T-H and a Stanley transformer, two Thomson recording wattmeters, a Walker recording ammeter, and other testing apparatus. Two arc lamps, arranged for incandescent circuit, and over 100 incandescent lamps have been put in.

The workshop contains a Reed lathe, 5-foot bed; an American Watch Tool Co.'s jewelers' lathe, 28" bed; a Barnes drill; Garvin milling machine; and suitable outfit of hand and machine tools. The shop is in charge of a skilled mechanic, who, besides caring for the engine and electrical machines and keeping in repair the apparatus already in possession of the laboratory, will construct special pieces of apparatus for lecture and laboratory use, which cannot be purchased ready made.

The electrical equipment is designed primarily for purposes of instruction, and at present the only rooms that will be lighted by electricity are the dynamo room, Electrical Laboratory, the Observatories, and the Physical Lecture-room, Reading-room, and Laboratory in Observatory Hall. It is believed that the Electrical Laboratory, though small, will furnish satisfactory facilities for the present for the work of instruction in electricity. Brick piers with marble tops, and solid oak benches, bolted to the walls of the building, and free from the floors, have been put in. In order to have the magnetic force constant in the building, the gas, water, and steam pipes, and other metallic parts are of brass. In few laboratories are the direction and intensity of the magnetic force so nearly constant as here.

CHEMISTRY.—The work of investigation upon certain condensation products of aromatic aldehydes, mentioned in a previous BULLETIN, is being prosecuted with very satisfactory results. A number of new compounds have been prepared and studied, all of which confirm and illustrate the hypothesis with which the work was undertaken. It is hoped that one portion, at least, of the work can be so far completed as to warrant its publication about the mid-year.

GEOLOGY.—*Geological Survey.*—During the early part of the summer vacation, Prof. Rice was engaged in the study of the Triassic traps and sandstones in the vicinity of Middletown, under the auspices of the United States Geological Survey. He was assisted by Mr. J. C. Graham, of the class of 1890, and by Messrs. A. P. Bryant and E. L. Rice, of the present Senior class. In the case of the undergraduate students, the work done on the Survey is to be considered as part of their work for Special Honors in the Department. The time available was not sufficient for the completion of the work assigned to Prof. Rice, and the work will probably be resumed next summer vacation.

II. Geology.—This course is to be counted the present year as equivalent to four exercises per week, though the class meets regularly only three times per week. A large amount of work is done by the members of the class in the preparation of lectures on the special topics assigned to them, and (excepting in the winter) they are expected to devote most of their Saturdays to geological field-work.

BIOLOGY.—A course of lectures on the history of Bacteriology is given to the members of the class in Practical Biology, and to a few others with whom attendance is optional. The course consists of one lecture a week, and will outline the history of the study of bacteria from the invention of the microscope to the present.

A special course of reading on the subject of Evolution is pursued by several members of the Junior and Senior Classes, who meet the instructor once a week for conference and recitation.

The purchase of eight new microscopes has made it possible to furnish each member of the Practical class with an instrument. Apparatus for microscopical photography has been purchased, and the Bacteriological Laboratory has been supplied with a culture-oven, furnished by the experiment station.

Summer Marine Laboratory.—A number of students from Wesleyan have, during the summer vacation, made use of the advantages offered by the Cold Spring Summer Laboratory. This laboratory is under the auspices of the Brooklyn Institute, and was established in the summer of 1890. Prof. Cook was appointed Director for the summer of 1891, and conducted a course of instruction for eight weeks. For Wesleyan students the work was supplementary to the work in College and is counted toward a special honor in Biology.

REGULATIONS REGARDING SPECIAL HONORS

A number of changes have been made in the schedule of studies required of candidates for special honors in the several departments. The present requirements in all departments in which such changes have been made, are as follows:

LATIN.—1. All the courses in Latin except Course II.

2. The required courses in Greek; or the first two courses in German; the first two courses in French, and a course in Italian.

GERMAN.—1. All the courses in German.

2. The first two courses in French.

3. The course in Anglo-Saxon.

ROMANCE LANGUAGES.—1. All the courses in French and Italian.

2. The first two courses in German.

ENGLISH.—1. The required courses in English, including Composition.

2. One of the following groups of elective courses:—

(a.) Anglo-Saxon, Early English, and all the elective courses in English Literature.

(b.) Anglo-Saxon, Early English, Course I. in English Literature, and Courses I. and II. in German.

(c.) The elective courses in English Literature, Anglo-Saxon or Early English, and Course I. in History.

HISTORY, AND POLITICAL AND SOCIAL SCIENCE.—All the courses, required and elective, in History and Jurisprudence, and in Economics and Social Science.

PHILOSOPHY.—(a.) *General Philosophy*.—1. The five courses in Philosophy.

2. The three courses in Ethics and Evidences of Christianity.

(b.) *Psychology*.—1. The five courses in Philosophy.

2. The course in Ethics.

3. The required course in Physiology, and either the course in General Biology or one course in Practical Biology.

PHYSICS.—1. The Sophomore required course in Physics, and the Sophomore elective course in Mechanics.

2. Two years of Practical Physics (in at least one of which there shall be three exercises per week).

3. Any three of the following courses:—Sound and Light, Heat and Electricity, Applied Electricity, Mathematical Theory of Electricity, Analytical Mechanics.

4. Course I. in Chemistry.

5. Either Course II. in Chemistry, or Course V. in Mathematics.

GEOLOGY.—1. The required courses in Geology and Physiology.

2. The elective courses in Zoology, General Biology and Botany, and Physical Geography.

3. The course in Mineralogy, and Course II. in Geology.

4. Either Course IV. in Biology, or Course II. in Chemistry.

BIOLOGY.—1, 2. Same as for Geology.

3. Two years of Practical Biology.

4. Either Course II., or Course IV., in Chemistry.

Note. The Roman numerals denote the numbers of the courses as specified in the Catalogue for 1890-91.

THE PROPOSED CHANGE OF NAME OF WESLEYAN UNIVERSITY

As the canvass of the Alumni in reference to a change of name of the institution, to which reference has been made in the report of the annual meeting of the Alumni Association, is likely to be the end, at least for many years to come, of an agitation which has gone on in a desultory way for a number of years in the past, it seems desirable that a somewhat full report of the result of that canvass should be made public. With the circulars sent out by the Committee of Correspondence were enclosed postal cards for reply, on which were printed the two following questions:—1. "Do you think it desirable that the name of Wesleyan University should be changed?" 2. "If a change should be made, what name would you recommend?"

Of the answers to the first question, a few are so guarded by qualifying phrases, or are otherwise so ambiguous, that they can not fairly be counted as categorical answers, either affirmative or negative. Disregarding the ambiguous answers, the committee reported 355 votes in favor of a change, and 357 opposed. The distribution of the votes by decades of classes is as follows:—

1833-40,	-	-	-	-	-	-	Yes, 12; No, 21
1841-50,	-	-	-	-	-	-	Yes, 25; No, 27
1851-60,	-	-	-	-	-	-	Yes, 59; No, 57
1861-70,	-	-	-	-	-	-	Yes, 68; No, 63
1871-80,	-	-	-	-	-	-	Yes, 96; No, 75
1881-90,	-	-	-	-	-	-	Yes, 122; No, 114
							—
							355 357

The answers to the second question show a very wide range of difference of judgment. If all variations of form (as, for instance, Middletown College, College of Middletown, Middletown University, University of Middletown) are counted as separate names, the whole number of names proposed exceeds ninety. A decided plurality of votes is in favor of a purely local name. There are 95 votes for Middletown College, 74 votes for Middletown University, and 27 votes for Middletown without designation as either College or University. There are 15 votes for New England University, and 12 votes for University of Connecticut. Various other forms of local names are suggested in a few of the answers, as, for instance, University of Middletown, Middletown University of Connecticut, New England College, University of New England, Connecticut College, Connecticut University, College of Central Connecticut, Forest City, Woldford, Middlesex University, etc. Next to local names, the group of names most in favor are those connected with the name of Wesley. There are 27 votes for Wesley University, 24 for Wesley College, and 8 for Wesley without designation as either College or University. A few others propose to use the name John Wesley. Still others propose to make a name indirectly memorial of John Wesley, as Epworth or Oxford. Another considerable group of votes are those

in favor of adopting the name of some one of the former Presidents, or of some one of the munificent benefactors of the College. The names Fisk, Olin, Foss, Rich, Judd, Hoyt, Seney, and Ayres, accordingly appear in various modifications. Thirty-seven votes are in favor of adopting the name of some future benefactor, whose gifts shall be larger than those of any single donor in the past.

There is something significant in the chronological distribution of the vote. It will be observed that in the earlier classes there is a strong majority opposed to any change. The feeling in favor of a change appears to rise gradually to a maximum, which is attained in the decade 1871-80. That this tide has commenced to ebb, appears to be indicated by the fact that in the decade 1881-90 the vote is almost equally divided. This indication finds some confirmation in the fact that a canvass of the undergraduates, undertaken by the Argus Association, shows only 63 votes in favor of a change, and 100 against a change. The desire for a change had its root in the conviction that the College had outgrown, if it ever possessed, that strictly denominational character which its name would naturally suggest. The decline of the feeling in favor of a change, as evidenced by the vote of the later classes, is apparently due to the belief that, with the growing reputation of the College, the name Wesleyan is losing its original connotation, and becoming merely the name of a particular institution.

Another important consideration is the lack of agreement, among those desiring a change, as to what name should be adopted. The largest group of answers to the second question is of those which favor the name Middletown in some form or other; but, if we count together all the answers in which the name Middletown appears in any form, the aggregate is only 210, which is considerably less than one-third of the total number of votes. Moreover, since the second question was answered by many who answered the first question in the negative, this number, 210, includes the votes of many who are opposed to any change whatever, and whose preference for the name Middletown is, therefore, only a preference for that as compared with other proposed names.

In view of this state of things, the unanimous votes in the Board of Trustees and in the Alumni Association against any change of name appear natural and inevitable results.

THE NEEDS OF THE COLLEGE.

It is in no spirit of discouragement that we speak of the needs of the College. Its present needs are very largely the result of its prosperous growth in the last few years. The expansion of the College in any one direction requires increased provision in other directions; and to every healthy institution increasing achievement brings increasing ambition. It has been well said that poverty is the first duty of a College, for its opportunities for the useful employment of money are unlimited, while its resources can never be unlimited.

For a period of a few years, ending with the dedication of Judd Hall and the Memorial Chapel in 1871, the progress of the College in material facilities was

relatively greater than in its personnel. Since that date there has been an increase of 72 per cent. in the number of students, and of 117 per cent. in the number of the Faculty; yet within that time only two new recitation-rooms have been added, and the amount of dormitory accommodation for male students has been somewhat diminished by the necessity of reserving more rooms for offices of members of the Faculty. The necessity of having the same recitation-room used by a number of different instructors is a serious embarrassment in the preparation of the necessary illustrations for recitations and lectures. Moreover, most of the recitation-rooms are inadequate in size for our present classes. There is also urgent need of suitable administrative offices. There should be a convenient suite of rooms communicating with each other for the offices of the President, the Secretary, and the Registrar; and, in connection with these, there should be readily accessible, commodious, and attractive waiting-rooms for students and visitors. A single building, suitably planned, can be made to afford the necessary accommodation for both recitation-rooms and administrative offices.

It is unnecessary here to speak of the need of a better Gymnasium, and of the endowment of a Medical Directorship, without which no material facilities for physical culture can meet the requirements of a College; since the supply of these needs seems now happily assured.

The greatest need of the College at present we believe to be that of a larger Library. In the undergraduate courses of study, especially in the more advanced classes, the assignment to the students of special topics with bibliographical references is in some considerable degree taking the place of the old routine of recitation and lecture; and the prosecution of this more liberal mode of study is continually hampered by the lack of the necessary books. The increasing number of graduate students engaged in advanced study leading to Degrees higher than the Baccalaureate, intensifies the need for greater Library facilities. Most of all is an increase of the Library demanded for the work of the members of the Faculty. With increased sub-division of the work of instruction, and the release of the Professors in some degree from the formerly excessive burden of routine work, there comes an increasing ambition on their part and an increasing demand on the part of the constituency of the College, for the prosecution of original research in the various lines of science, philosophy, and literature. For the prosecution of such work a great increase of the Library is imperatively required.

Never in the past has Wesleyan University been so well equipped as at present for the routine work of the undergraduate courses in College; but, with its growing prosperity, the ambition is strengthened to fulfill the promise of its name—to be in truth a University: not, indeed, in the sense of a cluster of Professional Schools gathered about a College; but in the modern sense of an Institution where extended courses of advanced instruction are given to graduate students, where original research is carried on in large quantity and of high quality, and

where an intellectual life is maintained whose influence is felt by the community at large. By the labors and gifts and sacrifices of the past, Wesleyan has grown richer than ever before. In comparison with its own ideals, it is poorer than ever before.



CALENDAR.

1891.

- Sept. 17. Thursday, 9:00 A. M.,—First Half-year began.
Nov. 25, Wednesday, 12:00 M.,—Thanksgiving Recess will begin.
Nov. 29, Sunday, 8:50 A. M.,—Thanksgiving Recess will end.
Dec. 23, Wednesday, 12:00 M.,—Christmas Recess will begin

1892.

- Jan. 7, Thursday, 9:00 A. M.,—Christmas Recess will end.
Jan. 28, Thursday,—Day of Prayer for Colleges.
Feb. 8, Monday,—Feb. 13, Saturday,—Mid-year Examinations.
Apr. 6, Wednesday, 12:00 M.,—Easter Recess will begin.
Apr. 14, Thursday, 9:00 A. M.,—Easter Recess will end.
June 29, Wednesday,—Commencement Day.

—THE—
Wesleyan University Bulletin.
MIDDLETOWN, CONN.

MAY, 1892.—No. 10.

THE college year which is now drawing to a close, opened hopefully with the largest number both of instructors and of students which the college has ever attained. Though marked by no epoch-making events, it has been a year of quiet prosperity—a year of earnest and harmonious work.

The last few years have brought to the college a gratifying increase in the number of instructors and of students, in endowment funds, and in apparatus for research and instruction. With the increase in men and means, there has been a gratifying advance in the breadth and thoroughness of the curriculum, and in scholarly tone and spirit. The first radical departure from the principle of an invariable curriculum was made in 1873, though a few studies had been elective before that date. The Catalogue for 1873-4 announces twenty-one elective courses. For a good many years the number of instructors was insufficient to allow any considerable increase in the number of elective courses. In the Catalogue for 1887-8, the year in which the publication of the BULLETIN was commenced, only thirty-two such courses were announced. The number given the present year is fifty-seven. Besides these, there are a number of courses omitted the present year, but given in alternate years; and the present BULLETIN announces a number of new courses to be added to the curriculum next year. These elective courses, almost without exception, extend through the year, opportunity for choice being afforded only at the beginning of the year. With the increase of the number of elective studies has come gradually a slight diminution of the amount of required work; but the elective courses belong mostly to the last two years of the curriculum, the work of the first two years being still mainly required.

The mere increase in the number of elective studies does not adequately represent the advance in the character of the work. Many of the elective courses

added in the last few years are in a strict sense advanced courses—courses which presuppose a considerable amount of knowledge on the part of the student, and in which the methods of study and instruction are such as to put him, in greater or less degree, in the attitude of an original investigator. The method and spirit of the German Seminar have been introduced in increasing measure in most of the departments.

With the increased development of graduate study, the institution is coming to fulfil in larger measure the promise of its name—to be more truly a University. At the Commencement in 1891, the degree of Master of Arts was given for the last time in course without examination. A considerable number of the most gifted and promising of the recent graduates of the college are pursuing courses of study with reference to the degrees of Master of Arts and Master of Science, some of them in residence, others *in absentia*. At the coming Commencement a number of candidates will doubtless be admitted to the Master's degree after due examination on thorough advanced courses of study. With the increasing number of graduate students, and the increasing attention bestowed upon this phase of the work of the institution, courses of lectures have been announced in several departments designed especially or exclusively for graduate students.

The kind of progress just indicated renders increasingly imperative some of the needs of the institution. The larger number of instructors and of elective classes demands increasing accommodation in the way of lecture-rooms and laboratories. The advance in the character of the work and the adoption in increasing degree of seminary methods call for a large increase in the library.

TRUSTEE MEETING.

The adjourned annual meeting of the Board of Trustees of Wesleyan University was held in New York City, March 4, 1892, with twenty members present.

The recommendation of the President that the so-called mathematical room in Judd Hall be refitted for the use of the department of Biology, and that a part of South College be rearranged to meet the need of further class-rooms, was adopted.

A committee, consisting of J. M. Buckley, S. H. Olin, and J. E. Andrus, was appointed to coöperate with the President of the University in the matter of raising additional funds for the Fayerweather Gymnasium, and to report at the next annual meeting.

An offer of \$5,000 toward the gymnasium by George West was acknowledged by a vote of thanks to the donor.

The recommendations of the Faculty concerning the increase in length of the

summer vacation, and the readjustment of the Christmas and Easter recesses, were adopted. A statement of these changes will be found elsewhere in this BULLETIN.

Frank B. Dains, M. S., was appointed Assistant in Chemistry for the year 1892-93.

The proposition to devote this year \$600 of the unexpended Reading Room fund to meet the deficiency in the Library fund was referred to the Executive Committee with power.

The gift to the College of the greater part of the library of Dr. John Johnston, former Professor in the University, was made known, and the President of the University and D. H. Ela were appointed a committee to make appropriate recognition to Professor Johnston's sons.

A communication was received from a committee of the college students, one from each class, relative to making the English Bible an elective study in the curriculum. It was read, and the subject was referred to a committee consisting of M. D'C. Crawford, Wm. Rice, and D. H. Ela.

A suitable minute was adopted concerning the late Dr. Daniel Ayres, whose great gifts to the College are well known; and committees were appointed to express the sympathy of the Trustees to the family of the late Simeon S. Scranton, a member of the Board, and to Orange Judd, a Trustee and generous benefactor of the College, whose son, a graduate in the class of 1883, had recently died.

RECENT GIFTS.

Several hundred dollars have this year been placed in the President's hands by friends of the college, to be used at his discretion for the assistance of needy students.

The sum of one thousand dollars has been given by Mr. Frank S. Jones, of Brooklyn, N. Y., to found a scholarship to assist in paying the tuition of a worthy undergraduate student.

To the fifty thousand dollars appropriated for the construction and maintenance of a gymnasium, about thirteen thousand dollars have already been added. It is hoped that this sum may be increased to thirty-five thousand dollars, making the total amount of eighty-five thousand dollars available for the purposes indicated, and that the subscriptions may be so far advanced by the approaching Commencement that the Trustees may authorize the immediate beginning of the building.

DEPARTMENT NOTES.

LATIN.—In accordance with regulations recently adopted by the Faculty, the following changes will be made in the courses for next year.

The work in Course I. for the second half-year will be upon the *Trinummus* of Plautus, the *Phormio* of Terence, and the *De Senectute* and *De Amicitia* of Cicero, with such further readings from these authors as circumstances may dictate.

The work in Course II. will be unchanged next year, but after that date will consist entirely of readings from Hórace, twice a week throughout the year.

In Course III. exercises will hereafter be held twice instead of three times a week, and the work will be based upon the letters of Cicero and the minor works of Tacitus.

Of Courses II. and III., either may be elected without the other, but under ordinary circumstances only those students who take, or have taken, both Courses II. and III. will be admitted to Courses IV.-XI. inclusive.

The work in the Latin Seminary will consist of an introduction to the general subject of Latin Epigraphy, with the special study of certain inscriptions illustrating the constitution and history of the Empire under Augustus.

Other courses will be given as announced in the Catalogue for the current year.

ENGLISH LITERATURE.—The Senior Class in English Literature (Course II.) will, next year, read the literature of the Victorian Period, 1832-1880.

A course of one hour a week will probably be given, next year, to graduate students only. The general topic covered in this course will probably be "The History and Development of Literary Criticism in England."

ENGLISH LANGUAGE.—1. Lounsbury's *History of the English Language* will probably be used as a text-book by the Freshman Class, next year. Illustrative etymological exercises will be based upon Sweet's *Anglo-Saxon Primer*.

2. The text-book for the Juniors in Anglo-Saxon next year will be Bright's *Anglo-Saxon Reader*, with an introductory course in Sweet's *Anglo-Saxon Primer*. Anglo-Saxon will hereafter be required of all who intend to elect the courses in Early English. One of these courses in the near future will probably be an advanced study of Chaucer.

3. A graduate course in Gothic, with especial reference to English etymology, will be given next year. In addition to independent phonetic investigations, there will be regular meetings for the reading of the text of Wulfila and for discussion of etymological questions. The books used will include Wright's *Gothic Language Primer*; Balg's edition of Wulfila; Balg's translation of Braune's *Gotische Grammatik*; Skeat's *Elements of English Etymology*; Balg's *Comparative Glossary of the Gothic Language*.

ROMANCE LANGUAGES.—Those who intend to elect the courses in Old French and Italian should inform the instructor of such intention before Commencement, as the books will have to be imported during the summer vacation.

MATHEMATICS.—1. In anticipation of the change in the amount of required study in Mathematics, which is announced in another part of the BULLETIN, Analytical Geometry has taken the place of Algebra as the mathematical study of the Freshman Class for the present term.

2. Course II. will be replaced next year by a two-hour elective course in Algebra, open to Classical and Latin-Scientific Sophomores, and Scientific Freshmen. This course will be adapted to the needs of those who have in view the possi-

bility of teaching elementary mathematics, as well as of those who purpose to take advanced mathematical elective courses.

3. Course III. will be omitted next year, but will be given in 1893-94.

4. Course VI. will be an advanced course in Differential and Integral Calculus, in continuation of Course V. of this year.

PHILOSOPHY.—I. The Junior Elective Course in Philosophy, now designated Course III., will hereafter be divided. The new Course III. will comprise the Introduction to Philosophy, and will be given in the first half-year, two hours per week. Course IV. will follow Course III., and will be open to those who have taken the latter; it will include Ancient and Mediæval Philosophy.

2. In the Senior year, Modern Philosophy will be given three hours a week during the first half-year, instead of two hours throughout the whole year, as at present. It will cover the history of modern systems to the death of Hegel. Under ordinary circumstances it will be elective only for those who have taken Courses III. and IV.

The course now known as Course V., will hereafter be given in the second half of the Senior year, three hours a week, and will include lectures on philosophy since Hegel, in addition to the selected readings.

These changes are expected materially to increase the efficiency of the work of the department. Students who desire some general acquaintance with philosophical questions, will hereafter be able to elect Course III., without the necessity of including the later and more technical courses; while those who choose to continue the work will find it graded in such a way as to facilitate advanced study.

ETHICS AND EVIDENCES.—The Senior elective course in Theism will hereafter be given in the second half-year, two hours a week, instead of one hour a week (counting as two) through the whole year. It will thus follow all the courses in Philosophy, except the last, and will be open only to those who have previously elected them.

GEOLOGY.—Since Professor Rice is to be absent on leave next year, for the purpose of travel and study, the required course in Geology for the Juniors will be postponed until Senior year. The elective courses in Mineralogy and in Advanced Geology will be omitted next year. The course in Physical Geography will be given by a special instructor, who is to be appointed.

Professor Rice expects to complete, during the summer vacation, the work on the Geological Survey of the Triassic of Connecticut, on which he was engaged last summer, under the direction of Professor Davis, of Harvard University. Professor Rice will probably be assisted by Messrs. Bryant and Rice of the graduating class.

CHEMISTRY.—A course of lectures on some of the industrial applications of Chemistry will be given next year by Mr. Dains. The course will occupy one hour per week, and will be elective for all who have taken Course I.

For several years past investigations have been in progress in the Chemical Laboratory, relating to the chemistry of fish and other food materials, and to

the subject of dietaries. In connection with these investigations some more abstract inquiries have been undertaken in regard to the heats of combustion of various organic substances. During the present year Professor Atwater and Mr. Woods have improved the opportunity of a stay of several months in Europe, to secure some improved apparatus, including a calorimeter, and to examine into methods of investigation there employed, with a view to more extended studies in the future.

While the cost of the researches referred to has been partly defrayed by the U. S. Fish Commission, the U. S. Department of Labor, and the Smithsonian Institution, liberal contributions have been received from Messrs. F. B. Thurber and E. G. Blackford of New York City, and A. R. Crittenden, J. W. Alsop, and I. E. Palmer of Middletown.

PHYSICS.—The courses in Elementary Physics, Practical Physics, Applied Electricity, and the Mathematical Theory of Electricity will be given next year as announced in the last Catalogue. Instead of the courses there announced in Elementary Mechanics, and Sound and Light, the following courses will be offered:

1. Laboratory work, parallel with and supplementary to the required course in Elementary Physics. Twice a week; elective for Sophomores.
2. Mechanics and Sound. Twice a week; elective for Juniors.
3. Light. Twice a week; elective for Juniors.

BIOLOGY.—1. There will be given next year a course of lectures and recitations, one hour a week, upon the general subject of evolution. This course will be elective for Juniors and Seniors, and will be given only in alternate years.

2. *Practical Biology.* The expansion of the work in Practical Biology has made necessary an increase in the facilities for laboratory work. In accordance, therefore, with the action of the Trustees at their mid-year meeting, the whole of the second floor of Judd Hall will be devoted to Natural History. The necessary re-arrangements will be made during the coming summer, and the different rooms will be devoted to the following purposes. Room 5 will be Professor Conn's private room, and will be used also as a reading room. Room 6 will be used for physiological experiments. Room 7 will be fitted up as a general laboratory, to accommodate 25 students. Room 8 will be the lecture-room, as hitherto. Room 9 will be used in general for the preparation of material for laboratory purposes, but a portion of it will be converted into a dark room for microscopic photography. Room 10 will be fitted up as a Bacteriological laboratory. It is thought that with this enlargement of facilities, the department of Biology will be in condition to meet all demands upon it for some time to come.

3. *Summer School.* The Marine laboratory, under the auspices of the Brooklyn Institute, located at Cold Spring Harbor, L. I., will again be under the direction of Professor Conn. This offers excellent advantages for study at the sea-shore, and work prosecuted there will be counted toward special honors in Biology.

LIBRARY.

Mr. E. H. Scott, of the class of 1892, has been selected as the Assistant Librarian for next year. The Library will be open every week day, except Saturday, from 8 A. M. to 1 P. M., and from 2.30 P. M. to 4.30 P. M. It will be open on Saturday from 8 A. M. to 12 M., and from 1 P. M. to 3 P. M. This will give eleven hours additional use of the Library each week.

During the present year the sons of the late Prof. John Johnston, II. D., presented to the Library the greater part of his collection of scientific books. Rev. J. W. Barnhart, of the class of 1861, has given forty-two volumes of the publications of the Société des anciens Textes français, and has authorized the purchase of a number of works on biology.

Graduates of the earlier classes are requested to send to the library catalogues and other college publications prior to 1860.

Particular attention is called to the partial list of desiderata in files of periodicals given below. This list is published with the purpose of indicating to such friends of the library as may possess odd numbers or incomplete sets of periodicals, a very practical way of benefiting the library. The volumes and years indicated are the ones *wanted* by the library. Roman numerals indicate series. Friends who desire to give periodicals, either those included in this list or others, are requested to write to the Librarian, W. J. James, before sending packages. The library will pay express charges on packages, unless the donors prefer to send them prepaid.

Academy (The), Syracuse, and Boston. v. 1-6, 1886-91.

Academy (The), London. v. 1-8, 12. 1869-75, 1877.

American (The), Phila. v. 1-22. 1881-91.

American Antiquarian, Chic. v. 1-13. 1878-91.

American Biblical Repository, N. Y. I. 1-12, II. 1-12, III. 1-6. 1831-49.

American Journal of Education [Barnard's], Hartford. v. 14-30. 1864-8.

American Magazine, N. Y. v. 1-9. 1885-88.

Annual Register, London. v. 60-133. 1818-91.

Appleton's Journal, N. Y. v. 1-26. 1869-81.

Arena (The), Boston. v. 1-4. 1889-91.

Athenæum, London. v. 1-95. 1828-91.

Bankers' Magazine, N. Y. v. 1-8, 13, 16-45. 1846-59, 1863-64, 1869-91.

Bibliotheca Sacra, Andover and Oberlin, O. v. 26. 1869.

Blackwood's Magazine, Edin. v. 60-64, 67-69, 71, 73-80, 105, 110, 128, 131-133. 1846-48, 1850-59, 1869, 1874, 1880, 1882-83.

Boston Quarterly Review, Boston. v. 1-5. 1838-42.

Brownson's Quarterly Review, Boston and N. Y. I. 1, V. 3-4, VI. 1, VII. 1-3. 1844, 1862-63, 1864, 1873-5.

Contemporary Review, London. v. 9-22, 27, 28, 34. 1868-73, 1875-76, 1878-79.

Cosmopolitan, N. Y. v. 1-9. 1886-90.

- De Bow's Commercial Review, New Orleans. I. 1-34, II. 1-8. 1846-64, 1866-70.
- Dial (The), Boston. v. 1-4. 1840-44.
- Eclectic Engineering Magazine, N. Y. v. 1-35. 1869-86.
- Eclectic Magazine, N. Y. I. 1-63, II. 1-41. 1844-85.
- Eclectic Museum of Foreign Literature, N. Y. v. 1-3. 1843.
- Edinburgh Annual Register, Edin. v. 17-19. 1824-26.
- Edinburgh Review, Edin. v. 129-130. 1869.
- Education, Boston. v. 1-11. 1880-91.
- Every Saturday, Boston. v. 1-17. 1866-74.
- Foreign Quarterly Review, London. v. 12-13. 1833-34.
- Fortnightly Review, London. II. 5-22. 1869-77.
- Galaxy, N. Y. v. 1-5, 16-25. 1866-68, 1873-78.
- Gentleman's Magazine, London. 1-271. 1731-1891.
- Granite Monthly, Concord, N. H. v. 1-10. 1877-87.
- Harper's Weekly, N. Y. v. 1-15. 1857-71.
- Harvard Monthly, Camb., Mass. v. 1-12. 1885-91.
- Historical Magazine [Dawson's], Boston, and Morrisania, N. Y. I. 1-10, III. 1. 1857-66, 1872.
- Hunt's Merchant's Magazine and Commercial Review, N. Y. v. 1-63. 1839-70.
- Illustrated London News, London. v. 1-63. 1842-73.
- International Magazine, N. Y. v. 4-5. 1851-52.
- International Review, N. Y. v. 1-14. 1874-83.
- Knickerbocker Magazine, N. Y. v. 1-65. 1833-65.
- Lippincott's Magazine, Phila. v. 1, 2, 7, 13-33. 1868, 1871, 1874-84.
- Literary World, Boston. v. 1-14. 1870-83.
- Littell's Living Age, Boston. v. 8-165. 1846-85.
- Macmillan's Magazine, London. v. 1-48. 1859-1883.
- Magazine of Western History, Cleveland and N. Y. v. 1-26. 1884-91.
- Manhattan (The), N. Y. v. 1-4. 1882-84.
- Metropolitan (The), N. Y. v. 1-6. 1853-58.
- Monthly Religious Magazine, Boston, v. 1-51. 1844-74.
- Monthly Review, London. II. 108, IV. 4-45. 1825 1832-45.
- Museum of Foreign Literature, Phila. I. 2-19, 21, 25-28, II. 1-3, 8-11, 13. 1823-31, 1832, 1834-37, 1839-40, 1841.
- Nation (The), N. Y. v. 1-6. 1865-68.
- National Quarterly Review, N. Y. v. 1-41. 1860-80.
- National Review, London. v. 1-14. 1883-90.
- Nature, London. v. 1-29. 1869-84.
- New England Magazine, Boston. v. 5, 7-9. 1833, 1834-35.
- New York Quarterly. v. 1-4. 1852-55.
- Niles' Register, Baltimore. v. 28-75. 1825-49.
- Nineteenth Century, London. v. 11. 1882.

- North British Review, Edin. v. 1-5. 1844-46.
 Norton's Literary Letter, N. Y. v. 1-6. 1858-60.
 Notes and Queries, London. 90 vols. 1849-91
 Old and New, Boston. v. 1-11. 1870-75.
 Overland Monthly, San Francisco. I. 1-15. II. 1-18. 1868-75. 1876-91
 Pennsylvania Magazine of History and Biography, Phila. v. 1-14. 1877-91
 Potter's American Monthly, Phila. v. 14-19. 1880-82
 Presbyterian Review, N. Y. v. 1-9. 1880-88.
 Princeton Review, Princeton, Phila., and N. Y. I. Biblical Repository. v. 1-4. 1825-28. II. P. R. v. 1-43. 1829-71. III. Presbyterian Quarterly. v. 1-6. 1872-77. IV. P. R. v. 3. 8-12. 1879, 1881-83
 Publishers' Weekly, N. Y. v. 1-9. 31-38. 1872-76, 1887-90
 Punch, London. v. 1-101. 1841-91.
 Putnam's Monthly Magazine, N. Y. I. 1, 2, 7-10. II. 1-6. 1853, 1856-57, 1868-70.
 Quarterly Journal of Economics, Cambridge, Mass. v. 1. 1886-87.
 Quarterly Review, London. v. 93-94, 100, 126-127. 1853-54, 1857, 1869
 Republic, Washington. v. 1-8. 1873-77.
 Saturday Review, London. v. 1-37. 1855-74.
 Science, N. Y. v. 1, 2. 1883.
 Southern Literary Messenger, Richmond. v. 1-8, 10-36. 1834-42, 1844-64
 Spectator, London. v. 1-46. 1828-74.
 Spirit of the Pilgrims, Boston. v. 2-6. 1829-33.
 Westminster Review, London. v. 1-3, 7-19, 117-118. 1824-25, 1826-33, 1882.

CHANGES IN THE COURSES OF STUDY.

The Departmental Notes contain announcements of numerous changes in the elective courses, chiefly in the direction of increase in their number. Two changes in the required work demand special notice.

The required course in Political Economy is to be given hereafter in the Junior year, that students may be better prepared for the electives in that department in the Senior year. Constitution of the United States will probably be made a required study in Senior year. Next year the arrangement will necessarily be transitional. Both Juniors and Seniors will take Political Economy, and there will be no course in Constitution of the United States.

Hereafter Analytical Geometry will be a required study in the Freshman year of the Classical and Latin-Scientific Courses, and advanced Algebra will be an elective study in Sophomore year. Mathematics will accordingly be an elective after Freshman year. Latin and Greek will also be elective in Sophomore year. The student will not be allowed, nevertheless, to drop at that stage of the curriculum both of the two departments of Classics and Mathematics. It is provided that each student in the Classical Course must include in his electives one of the following combinations—1. not less than one course of two

hours per week in each of the three departments of Latin, Greek, and Mathematics; 2. not less than five hours per week of electives in Mathematics and Physics, both Latin and Greek being dropped; 3. not less than five hours per week in Latin and Greek, and not less than one course of two hours per week in each of those departments.

CHANGES IN REQUIREMENTS FOR ADMISSION.

The change made in the order of the Mathematical studies necessitates some change in the requirements for admission to the Scientific Course.

Candidates for the Scientific Course will hereafter have the option of the three following series of requirements:—

A.

MATHEMATICS.—Same requirements as for the Classical Course, with the addition of the following subjects:—

1. Solid and Spherical Geometry.
2. Plane and Spherical Trigonometry, with the use of Logarithmic and Trigonometric Tables.
3. Analytical Geometry, including the straight line, the circle, and the elementary properties of the conic sections.

ENGLISH.—Same requirements as for the Classical Course.

MODERN LANGUAGES.—French or German, at the option of the candidate. Such a knowledge of the language chosen will be required as will enable the candidate to read easy passages at sight, and to answer elementary grammatical questions. The work is intended to be substantially equivalent to Course I. in French or German, as defined in the Catalogue.

B.

MATHEMATICS.—Same requirements as for the Classical Course.

ENGLISH.—Same requirements as for the Classical Course.

MODERN LANGUAGES.—The equivalent of Course I. in both French and German, and Course II. in either French or German, at the option of the candidate.

C.

MATHEMATICS.—Same requirements as for the Classical Course.

ENGLISH.—Same requirements as for the Classical Course.

MODERN LANGUAGES.—Same as in Course A.

NATURAL SCIENCE.—Any two out of the three following courses, at the option of the candidate:—

I. *Botany and Physical Geography*.—1. In Botany the candidate must pass an examination in Gray's *Lessons in Botany*, and must show ability to dissect any flowers of no extraordinary difficulty, and to write descriptions of them. He must also present an herbarium of not less than fifty species, collected and classified by himself.

2. In Physical Geography, such a knowledge of the subject will be required as can be gained from the study of Geikie's Elementary Lessons.

II. *Chemistry*.—1. Such a knowledge of the subject will be required as can be gained from Eliot and Storer's Manual of Chemistry, pp. 1-143.

2. The candidate must also have performed a series of at least fifty experiments, and must present his original note-book, containing records of the processes and results of the experiments, and certified to by his instructor.

III. *Physics*.—1. Such a knowledge of the subject will be required as can be gained from Gage's Introduction to Physical Science, or Avery's First Principles of Natural Philosophy.

2. The candidate must also have performed a series of at least thirty experiments involving careful measurements, and must present his original note-book, containing full records of the experiments, and certified to by his instructor. The experiments may be selected from Worthington's Physical Laboratory Practice, or from any other elementary laboratory manual.

Candidates for the Scientific Course the present year may also be admitted on passing examination on the requirements prescribed in the last Catalogue.

After 1893, candidates electing Course A or Course B will be required to take in addition one of the three courses in Natural Science specified above, and those electing Course C will be required to take all three of the courses in Natural Science.

LECTURES AND PUBLICATIONS BY MEMBERS OF THE FACULTY

By Professor Rice.—Twenty-five Years of Scientific Progress. Annual Address of the President of the American Society of Naturalists, Philadelphia, Dec., 1891.

The Yellowstone National Park. A lecture delivered in the Chapel of the Methodist Church in Middletown.

He has published a series of scientific articles in *Zion's Herald*.

By Professor Atwater.—Ueber das Versuchstationswesen in den Vereinigten Staaten. Address at the meeting of the Gesellschaft deutscher Naturforscher und Aertzte, at Halle, in September, 1891.

Publications.—Investigations upon the Chemistry and Economy of Foods. By W. O. Atwater and C. D. Woods.

Several articles in the Experiment Station Record.

The Food Supply of the Future, in the *Century Magazine* for November, 1890.

By Professor Winchester.—Lectures.—A course of five lectures in Wall College, Aurora, N. Y.

A course of four lectures in Elmira College, Elmira, N. Y.

A course of nine lectures, on English Poetry, 1789-1832 in the Johns Hopkins University.

A course of six lectures, on the Literature of the Queen Anne Period, before the West Philadelphia Branch of the Society for the Extension of University Studies.

A course of four lectures, on Four Victorian Poets, in Brown University.

A lecture before the Phi Beta Kappa of Yale University.

Single lectures in Providence, New London, Norwich, New Haven, New Bedford, and various other cities, and before various other schools.

Publications.—Six Short Courses of Reading in English Literature, with Biographical and Critical References. Ginn & Co., Boston, 1891.

A Review of White's Philosophy of American Literature, in the *Educational Review* for July, 1891.

James Russell Lowell as Man of Letters. *The Review of Reviews*, for September, 1891.

Review of Mrs. Sutherland Orr's Life of Browning. *Zion's Herald*, Aug. 26, 1891.

By Professor Armstrong.—Review of Erdmann's History of Philosophy, *Presbyterian and Reformed Review*, July, 1891.

By Professor Conn.—Three public lectures at Cold Spring Harbor, on the following subjects:—Bacteria in Milk; Uses of Bacteria; Instincts of Insects.

Two lectures at Brooklyn Institute, on Hostile Bacteria and Friendly Bacteria.

The lecture on Uses of Bacteria has also been given at the annual meeting of the Conn. Board of Agriculture, before the Torrey Botanical Club at Columbia College, and before a scientific association at Smith College.

Publications.—Root Tubercles of Leguminous Plants. *Experiment Station Record*, June, 1891, Vol. II., No. 2.

The Function of Root Tubercles. *Experiment Station Record*, Vol. III., No. 1.

Ueber einen bittere Milch erzeugenden Micrococcus. *Cent. f. Bacteriologie u. Parasitenkunde*, IX., No. 20, 1891.

Natural Selection and Christianity. *Methodist Review*, July–August, 1891.

The Living World,—Whence It Came and Whither It is Drifting. G. P. Putnam's Sons, New York, 1891.

Some Uses of Bacteria. *State Board of Agriculture Reports*, 1891. Reprinted in *Science*, May 6, 1892.

By Dr. Eichelberger.—The Orbit of Hyperion. *The Astronomical Journal*, Nos. 259–60.

By Mr. Goodrich.—Lectures.—On Horseback through Palestine. Middletown, Nov., 1891; Waterbury, Nov., 1891; Durham, Feb., 1892.

Ancient and Modern Athens. Waterbury, Dec., 1891.

RECENT APPOINTMENTS.

Below is given a list of appointments in various colleges, received during the present year by graduates of Wesleyan University. This list includes only positions upon which the respective incumbents have entered during the present college year.

Class of 1861.—George Whitaker, President of Willamette University.

1865.—Richard Hubbard Rust, President of Cincinnati Female College.

- Class of 1875.—Willard Mayhew Parker, Vice-President of Throop University, Pasadena, California.
- 1882.—Karl Pomeroy Harrington, Professor of Latin in the University of North Carolina.
- 1883.—William John James, Librarian of Wesleyan University.
- 1884.—Lorenzo Nickerson Johnson, University Scholar in Harvard University.
- 1884.—Herbert Edwin Russell, Associate Professor of Mathematics and Natural Science in Denver University.
- 1886.—Edward Bennett Rosa, Associate Professor of Physics in Wesleyan University.
- 1886.—Edgar Alfred Emens, Adjunct Professor of Greek in Syracuse University.
- 1888.—John Law Bridge, Fellow in Chemistry in Clark University.
- 1888.—Aaron Lewis Treadwell, Professor of Biology in Miami University.
- 1889.—William Emory Smyser, Instructor in Rhetoric in Northwestern University.
- 1889.—Mary Graham, Teacher of Philosophy and Political Economy in Mt. Holyoke College.
- 1890.—Frank Burnett Dains, Assistant in Chemistry in Wesleyan University.
- 1890.—Frederic Samuel Goodrich, Tutor in Greek in Wesleyan University.
- 1890.—Lewis Gardner Westgate, Assistant in Geology in Harvard University.
- 1890.—John Andrew Bergström, Fellow in Psychology in Clark University.
- 1891.—George Hamilton Bickford, Instructor in English, Political Economy, and Physical Training in Haverford College.
- 1891.—Belle Evangeline Graves, Instructor in Latin in Cornell College, Mt. Vernon, Iowa.
- 1891.—Charles Wilfred Savage, Assistant in Physics in Wesleyan University.
- 1891.—Frederick Allen King, Assistant Librarian in Wesleyan University.
- 1891.—Tibbetts Walker, Squire Scholar in Wesleyan University.

JUNIOR EXHIBITION.

The annual Junior Exhibition was held on the evening of Thursday, April 25th. The Committee of Award were Rev. John H. Mason, M. A., of New Haven; Rev. William Worthington, M. A., of Middletown; and Edward H. Smiley, M. A., of the Hartford High School. The first prize was awarded

to Wesley Elwell Lake, whose subject was "William Makepeace Thackeray, Humorist;" the second prize, to Ashley Horace Thorndike, who discussed "Matthew Arnold's View of Human Life, as Indicated in His Poetry."

THE YOUNG MEN'S CHRISTIAN ASSOCIATION.

The Young Men's Christian Association of the College has been especially active and prosperous during the past year. Of the students, 183 are members of the Association, 151 on the active list. At the State Convention in Meriden the College was represented by 23 delegates, and about 30 will probably attend the World's Student Conference at Northfield in July. Over 100 students have taken part in religious work in the vicinity of Middletown. There are 17 volunteers for Foreign Missions, who have held weekly missionary meetings. Two Bible classes have been conducted by professors, and three by students. A neat hand-book for the year has been published.

During the year the Association has secured 21 lectures before the College. Seven of these have been delivered by members of the Faculty upon subjects relating to the Bible in connection with their several departments. Among those who have come from without the College to address the Association, have been: Mr. S. M. Sayford, the College Evangelist; Rev. Wallace MacMullen, of Springfield; Rev. Dr. G. R. Crooks, of Drew Seminary; Hon. Thos. Cochran, of the International Committee of the Young Men's Christian Association; Professor F. K. Sanders, of Yale University; and Rev. Dr. S. L. Baldwin, Recording Secretary of the Missionary Society of the Methodist Episcopal Church.

MIDDLETOWN SCIENTIFIC ASSOCIATION.

The following papers have been read at the meetings of the Middletown Scientific Association during the present College year:—

Oct. 13.—An Illustration of the Danger of Interfering with Nature. H. W. Conn.

Nov. 10.—The Rocky Mountain Excursion of the International Geological Congress. W. N. Rice.

Dec. 8.—History of Photography. Chas. D. Woods. Note on Some Recent Work in the Organic Laboratory of the College. F. B. Dains.

Jan. 12.—History of Bacteriology. H. W. Conn.

Feb. 9.—History and Theory of Dyeing. W. P. Bradley.

March 8.—The History of the Spectroscope. M. B. Crawford.

May 10.—History of the Reconciliations of Genesis and Geology. W. N. Rice.

A special feature of the meetings of the Association this year has been a series of papers on various phases of the history of science. These papers have been of somewhat popular character, and the meetings have been largely attended.

It is earnestly desired that members of the College and others interested in scientific studies become members of the Association, and avail themselves of the privileges which it affords.

DANIEL AYRES.

In the death of Daniel Ayres, biological science has lost an earnest friend and cultivator, the arts of medicine and surgery an eminently successful practitioner, and Wesleyan University one of its most munificent benefactors.

Daniel Ayres was born Oct. 22, 1822. He prepared for college in Middletown, Conn., in the school taught for many years by Daniel H. Chase, LL. D. He entered Wesleyan University in 1838; but left at the close of his Junior year, and went to Princeton. In 1842 he was graduated A. B. from the College of New Jersey, and in 1845 M. D. from the Medical Department of the University of the City of New York. The remainder of his life was spent in Brooklyn, N. Y., in the practice of his chosen profession. In 1856 he received the degree of LL. D. from Wesleyan University. From 1857 to 1875 he was Professor of Surgery in Long Island Medical College, and he bore the title of Professor Emeritus in that institution thereafter until his death. He died at his home in Brooklyn, Jan. 19, 1892.

Dr. Ayres always regarded the intellectual awakening which led to the eminent success of his professional career as dating from his student life in Middletown in the preparatory school and in Wesleyan University. During those years he acquired a great fondness for biological science, and a disposition to form his opinions by independent observation of nature, rather than by reliance upon authority. He left Wesleyan University at the close of Junior year, because its curriculum then made no provision for advanced study in the sciences for which he had already acquired so decided a taste. But he always treasured in most grateful memory the institution in which his intellectual life had received so decided an impulse.

His disposition to rely upon nature rather than upon authority made his professional practice bold, original, and inventive. In surgery he ventured often upon new or unusual modes of operation. In plastic surgery he was one of the pioneers. He was influential in the foundation of the Long Island Hospital and Medical College, in whose faculty he held a place from the beginning of its history.

Dr. Ayres's gratitude to Wesleyan University found noble expression in numerous gifts. The prize which bears his name was one of the earliest prizes established in the institution. His gift of a quarter of a million dollars in December, 1889, placed him in the foremost rank of the patrons of Wesleyan University. With characteristic breadth of view, he intrusted this large sum to the corporation of the college with no specific conditions, expressing only the desire that the gift might contribute to the advancement of those sciences which he himself had learned to love in Wesleyan University, but which the managers

resources and narrow curriculum of the institution at that time failed to afford him the opportunity to study as extensively as he desired. This princely gift was preceded at an interval of only a few months by gifts amounting to fifty thousand dollars for the endowment of the professorship of Biology, which most fitly bears his name.

CHANGES IN THE CALENDAR.

The following changes in the stated calendar of the University were adopted by the Trustees at their adjourned annual meeting.

In order to accommodate the many alumni who would otherwise be unable to be present in Middletown during Commencement week, the date of Commencement (the last Wednesday in June) is left unchanged; but the first term is to begin thirteen weeks thereafter, instead of eleven weeks, as at present.

The winter recess will hereafter extend from Dec. 24 to Jan. 2, inclusive, and the spring recess ordinarily from the Thursday before Easter Day to the Monday after it, inclusive.

CALENDAR.

1892.

- June 9, Thursday, 7:30 P. M.,—Junior Prize Debate and Freshman Prize Declamations.
- June 24, Friday, 7:30 P. M.,—Junior and Sophomore Prize Declamations.
- June 26, Sunday, 10:30 A. M.,—Baccalaureate Sermon, Rev. Bradford Paul Raymond, D. D., LL. D.
- June 26, Sunday, 7:30 P. M.,—University Sermon, Rev. Professor Olin A. Curtis, D. D.
- June 27, Monday, 11:00 A. M.,—Report of Examining Committee and Awarding of Prizes.
- June 27, Monday, 2:00 P. M.,—Class Day Exercises.
- June 27, Monday, 8:00 P. M.,—Glee Club Concert.
- June 28, Tuesday, 9:00 A. M.,—Annual Meeting of the Trustees.
- June 28, Tuesday, 9:00 A. M.,—Meeting of the Φ . B. K. Fraternity.
- June 28, Tuesday, 10:00 A. M.,—Business Meeting of the Alumni Association.
- June 28, Tuesday, —Reunion of Classes of 1842, '52, '67, '72, '77, '82, and '85.
- June 28, Tuesday, afternoon,—Receptions by the College Fraternities.
- June 29, Wednesday, 10:00 A. M.,—COMMENCEMENT.
- June 29, Wednesday, afternoon,—Commencement Dinner.
- June 29, Wednesday, evening,—Reception by the President.
- June 30, Thursday, 9:00 A. M.,—Examination of candidates for admission.
- Sept. 23, Wednesday, 9:00 A. M.,—Examination of candidates for admission.
- Sept. 29, Thursday, 9:00 A. M.,—First Term begins.

—THE—
Wesleyan University Bulletin.

MIDDLETOWN, CONN.

NOVEMBER, 1892.—NO. 11.

THE college enters upon the new year with a Freshman class of 91, an increase of 21 over last year. The total number of students is now 271. Several changes have taken place in the list of the Faculty. Professor Rice has been granted a year's leave of absence, which he is spending in study in Europe. Associate Professor Rosa has been advanced to a full professorship in Physics. In Economics, the place of Mr. Daniels, who has accepted an associate professorship in Princeton College, has been filled by the appointment of Mr. W. C. Fisher as Associate Professor. In Greek, Dr. Charles J. Goodwin succeeds Mr. Goodrich, who was recently appointed Professor of Greek in Albion College. The course in Physical Geography is to be conducted during the absence of Professor Rice by Mr. Lewis G. Westgate. Other minor changes are mentioned elsewhere.

The only important change that meets the eye on the campus consists in the removal of the foot-ball field to that part of the rear campus heretofore set apart for base ball games, and the building of a low grand stand with a capacity for about 600 spectators.

A few indoor changes of considerable importance have been made. The dormitory for women students has been altered at considerable expense so as to accommodate the increased number there resident. Laboratory facilities in connection with work in Biology have been increased by re-arranging the rooms on the second floor of Judd Hall. A room for certain special investigations has been fitted up in the basement of the same building, and the steadily increasing need of more lecture rooms has been in some degree met by changes made in South College. All of these modifications are mentioned at greater length elsewhere in this BULLETIN.

At the last Commencement the revised scheme of requirements for admission in Latin and Greek came into effect, whereby greater prominence is given to the requirement of ability to translate at sight from and into English. And for the present year a number of new elective courses are opened in various departments, while several re-arrangements have been made in both elective and required work. The most noteworthy of these changes in its relation to the general curriculum is the one announced in the last BULLETIN, whereby the study of the Ancient Classics, or of Mathematics, may be dropped, at the option of the student, after the Freshman year. It is interesting to note that of the 40 students whose choice was made under the terms of this provision, 32 elected Latin and Greek, dropping Mathematics altogether, 8 chose to continue all three subjects through the Sophomore year, and none elected Mathematics to the exclusion of Latin and Greek. Evidently the new freedom allowed will not result immediately in great revolution with regard to the study of the Classics.

NOTES OF THE LAST COMMENCEMENT.

TRUSTEE MEETING.—The more important actions of the Board of Trustees at the Annual meeting, held at Middletown, June 28, 1892, are here noted.

The resignation of the Treasurer, Wm. Hoyt, on account of physical inability, was accepted, and a resolution of thanks for his long and faithful services was adopted. John E. Andrus was elected to the vacant office, and the other officers of the Board were re-elected for another year.

The election by the Troy Conference of Rev. James E. C. Sawyer as Trustee in place of Rev. Henry A. Starks, transferred, was announced, as was also the re-election of the other representative Trustees from Patronizing Conferences whose terms of office expired in 1892.

The following Trustees were re-elected by the Board for another term of five years: John H. Sessions, Wm. Connell, David H. Ela, George S. Bennett, Charles L. Rockwell, and George West; and the following were added to the Board: Rev. A. W. Hazen of Middletown, Conn., (*vice* Rev. Bishop Daniel A. Goodsell, resigned), and L. T. Wooster of Seymour, Conn., (*vice* Simeon S. Scranton, deceased).

The President of the University was authorized by the Board to confer the following honorary degrees: The degree of Master of Arts upon Rev. George Peck Eckman, of the Newark Conference; the degree of Doctor of Divinity upon Rev. Wm. Henry Burns, '67, of Chicago, Prof. Wm. Theophilus Davison, of the Richmond Training College, England, and Rev. Francis James Wagner, '63, President of Morgan College, Baltimore; and the degree of Doctor of Laws upon Hon. Charles Candee Baldwin, '55, Judge of the Circuit Court of the Eighth Judicial District of Ohio, and Hon. Martin Augustine Knapp, '68, Member of the Inter-State Commerce Commission.

The following appointments on the Board of Instruction were made: I. B. Rosa, Ph. D., Associate Professor of Physics, to be Professor of Physics; F. W. Nicolson, M. A., to be Tutor in Latin a second year; F. S. Goodrich, B. A., to be Tutor in Greek a second year; W. S. Eichelberger, Ph. D., to be Tutor in Mathematics and Assistant in Astronomy a third year; J. H. Barnhart, B. A., to be Assistant in the Museum; L. G. Westgate, M. A., to be Instructor in Physical Geography; C. W. Savage, B. S., to be Assistant in Physics a second year; D. S. Johnson, B. S., to be Assistant in Biology; E. H. Scott, B. A., to be Assistant in the Library; and O. S. Blakeslee to be Mechanician a second year.

[At the mid-year meeting of the Board, F. B. Dains, M. S., was appointed Assistant in Chemistry a second year, and since the annual meeting the following appointments have been made: W. C. Fisher, M. A., to be Associate Professor of Political Economy for three years, and Charles J. Goodwin, Ph. D., to be Tutor in Greek, *vice* F. S. Goodrich, resigned.]

A portion of the property known as the A. C. Foss place was set apart as an athletic field, and the Executive Committee were authorized to put it into shape for use.

[The field has since been found to be too small to afford room for both a baseball and a foot-ball field, and the Executive Committee has consequently suspended action in the matter.]

The following resolutions were adopted concerning the petition of the Young Men's Christian Association of Wesleyan University for the erection of a building on the northeast corner of College and High streets for the use of the Association and to include a General Assembly-Room and a Reading Room.

"*First*, We regard the erection of the building in question upon some suitable site owned by the University as very desirable.

"*Second*, We have a very high appreciation of the generosity and self-sacrifice of the students, shown in the subscription made by them toward the object.

"*Third*, We heartily commend the enterprise to the favorable consideration of the friends of Wesleyan, with the recommendation that when \$30,000 shall be subscribed for the purpose, the Trustees at once proceed with the work.

"*Fourth*, We refer the question of a site to a committee consisting of the members of the Executive Committee, the Finance Committee and the Committee on the Board of Instruction; giving them power to select any site on grounds owned by the University, and commending to their special consideration the lot at the northeast corner of High and College streets and near the northeast corner of the Campus itself, *i. e.*, that part of the Campus on High street lying directly south of the grounds of the President's house."

The committee, to which was referred, at the last mid-year meeting, the petition of the students for the introduction of the English Baccalaureate as an elective study into the curriculum presented their report to the effect that while they approve the object and realize its need, they do not feel like recommending it until some provision for financial support can be made. The report was re-

ceived, and ordered on file, and President Raymond, C. D. Foss, and Wm. Rice were appointed a committee with power to take into consideration the endowment of a Chair of Bible Study, and to establish such department if in their opinion sufficient financial support can be secured.

The subject of the Gymnasium was discussed. Announcement was made that subscriptions to the amount of \$14,707 had been secured, and the following resolution was adopted:

"*Resolved*, That the Trustees will begin the erection of a gymnasium as soon as reliable subscriptions amounting to \$25,000 shall have been secured; and will carry it forward to completion as rapidly as contributions for that purpose shall permit."

[As is announced elsewhere in this BULLETIN, this amount has already been secured.]

Certain changes in the By-Laws as recommended at the mid-year meeting of the Board were adopted. The most important of these concern the organization of the officers of the College into two bodies for purposes of administration: the Faculty, composed of the President, all actual officers of instruction, and such other officers as the Trustees may especially elect to that body, to transact all ordinary business; and the Academic Council, composed of the President, the full Professors, and such other officers as the Trustees may especially elect to that body, to consider questions concerning appointments to the Faculty.

By a unanimous vote the thanks of the Board were extended to Mr. Bowles Colgate for his generosity in furnishing the nucleus of a working library for the Greek Seminary, and to Mr. E. K. Hubbard, of Middletown, for his gift of \$400 to provide for the expense of a Fellowship in Physics during the coming year.

The usual formal business was transacted, a number of committees appointed, and the Board adjourned to meet in New York City at the call of its President, or of the President of the University.

ALUMNI ASSOCIATION.—The annual meeting of the Association was held on Tuesday of Commencement week.

A resolution was offered requesting the Trustees to set apart a suitable site for the proposed Y. M. C. A. building.

Wm. M. Ingraham and Martin A. Knapp were re-elected Trustees for a term of five years.

The committee on the voting of absentees in the election of Trustees reported that it was unable to secure legislation in the matter on account of the confused condition of the State Legislature.

THE FINANCES.—The following is an abstract of the Financial Exhibit presented by the Treasurer at the last Annual Meeting of the Trustees:—

Property of the University.

College buildings and campus,	-	-	-	-	-	\$400,000	00
Other real estate,	-	-	-	-	-	94,360	50
Scientific apparatus and collections,	-	-	-	-	-	61,030	00

Library, - - - - -	\$45,000 00
Furniture (including organ in Chapel), - - - -	3,600 00
Invested funds, - - - - -	991,075 00
Bills receivable, - - - - -	16,000 00
Cash, - - - - -	22,096 32

\$1,633,161 82

This does not include the Seney Scholarship Fund, amounting to \$100,000, nor the \$75,000 yet due from the Fayerweather Estate.

Income for year 1891-92.

Students' bills, - - - - -	\$17,038 80
Rents, and interest on investments, - - - -	52,991 67
Miscellaneous receipts, - - - - -	1,291 60

\$71,322 07

Expenditures for year 1891-92.

Salaries of Faculty, - - - - -	\$46,460 79
Expenses of Women's Dormitory, - - - -	2,187 27
Fuel, gas, and water, - - - - -	3,433 37
Insurance, - - - - -	487 72
Repairs and improvements, - - - - -	6,579 49
Laboratories, Observatory, and Museum, - - -	1,728 40
Library, - - - - -	1,657 79
Janitorial service, - - - - -	3,801 56
Miscellaneous expenditures, - - - - -	8,133 94

\$74,470 24

The deficit was more than covered by cash in hand at the beginning of the college year just closed.

RECENT ADDITIONS TO THE FACULTY.

Willard Clark Fisher, M. A., elected Associate Professor of Political Economy, received the degree of B. A. from Cornell University in 1888. The year after his graduation he remained at Cornell as Fellow in History and Political Economy. During the year 1889-90 he taught at Marathon, N. Y., and the following year was Instructor in Political Economy at Brown University in the absence of Professor Gardiner. In the autumn of 1891 he returned to Cornell for an additional year of study as Fellow in Political Science. Before his election to this associate professorship at Wesleyan University, he had been appointed Fellow in Political Economy and Teacher of Statistics at Chicago University. This place he resigned to accept his present position.

Charles Jaques Goodwin, Ph. D., elected Tutor in Greek, was graduated from Bowdoin College in 1887, with the degree of B. A. From 1887 to 1890 he studied at Johns Hopkins University. In 1888-89 he held a University Scholarship, and in 1889-90, a Fellowship in Greek and Sanskrit. In June of 1890 he received the degree of Ph. D., the subject of his thesis being "Apollonius Rhodius: His Figures, Syntax, and Vocabulary." During the two following years he was Professor of the Greek Language and Literature in Cornell College, Iowa.

Dr. Goodwin has published also: "A Contribution to Indian Mythology," (*University Circular*, 69, p. 20), "Skandayâga, Text and Translation," (*Proceedings of American Oriental Society*, May 7, 18 p. v.), "Similes of Apollonius Rhodius," (*University Circular*, 81, p. 73), "Apollonius of Rhodes and the Argonautica," (*Andover Review*, Sept., 1891).

Lewis George Westgate, M. A., was graduated from Wesleyan in the class of 1890, with the degree of B. A. From 1890 to 1892 he studied Geology at Harvard University, receiving there in June of 1892 the degree of M. A. In 1891-92 he was Assistant in Geology in Harvard University and also Assistant Geologist of the U. S. Geological Survey. During the current year he is pursuing a special course in Palaeontology at Yale University, and is Instructor in Physical Geography at Wesleyan.

Frank Burnett Dains, who is lecturing this year on Applied Chemistry, is a graduate of Wesleyan in the class of 1890. In June of 1891 he received the degree of M. S. for graduate study in Chemistry. In 1891-92 he continued his graduate work and served as Assistant in the Chemical Laboratory. In connection with Professor Bradley he made an investigation of the Action of Acetyl Chloride on Ortho-hydroxy-aldehydes, an account of which was published in the *American Chemical Journal* for April, 1892.

DEPARTMENT NOTES.

LATIN.—The first course in Prose Composition (IV. Latin) has been made an annual instead of a biennial course, and a second course in the same subject (V. Latin) is this year given for the first time. A considerable re-arrangement of work, announced in the last BULLETIN, has been carried into effect.

Room No. 5 in South College has been made the regular class-room of the department, instead of No. 3, the seminary room (41 N. C.) remaining the same.

GREEK.—A special course of readings in Greek orators, philosophers, and dramatists is given this year. The translations are made by the instructor, and collateral work is done by the class. The purpose of the readings is to raise the standard of class translation, and to gain a better knowledge of Greek ideas, and an enrichment of English vocabulary and expression. *One hour a week.*

ROMANCE LANGUAGES.—I. *Old French.*—The object of this course during the present year will be the reading of specimens of the most important literary

monuments, the study of Old French grammar and phonetics, and, toward the end of the year, the investigation of the laws of phonetic change as illustrated in *La Vie de Saint Alexis*.

2. *Italian*.—Beside the regular work assigned to the class, the instructor will read and interpret the whole of Dante's *Divine Comedy*, devoting the latter portion of each hour to this exercise. Rossetti's *Shadow of Dante* is used as collateral reading.

ENGLISH LITERATURE.—The number of examinations required of the class in Junior English Literature is this year reduced by omitting the three-hour examination hitherto held at the end of each term upon the "Collateral Readings." In place of these examinations, every member of the class will be required to submit, at the close of each term, a written thesis upon an assigned topic covering the reading of that term. Familiarity with the texts read will be further tested by a brief written examination—held during the regular recitation hour—on some day near the close of each term.

Graduate Instruction.—The graduate students in this department are investigating the development and growth of English Criticism. The critical work of Sidney, Ben Jonson, Dryden, Addison, Samuel Johnson, and of the principal review writers at the beginning of this century is taken as representing English critical writing and as indicating the direction that further study may take.

The class meets regularly once a week, for a session of an hour and a half—from 3:30 to 5 on Tuesday afternoon. Besides these regular meetings, other meetings are held at irregular intervals from time to time, as the progress of the work of the class may seem to require.

ENGLISH LANGUAGE.—I. Freshmen are allowed this year to choose one of the two following courses:

1. General History of the English Language, with lectures and illustrative examples from Anglo-Saxon. The text-books are Lounsbury's *History of the English Language*, Part I., and Sweet's *Anglo-Saxon Primer*. *Once a fortnight (counting as once a week)*.

2. A course in the Historical Plays of Shakspeare, with collateral reading in English history and the literary history of the Elizabethan period. *Once a fortnight (counting as once a week)*.

II. A graduate course in Gothic is given this year. In addition to the reading of the text of *Wulfila*, there is constant comparison of the phonology of Gothic and Anglo-Saxon, as well as independent phonetic investigation of Early English texts. *Once a week*.

ECONOMICS AND SOCIAL SCIENCE.—With the year 1892-93 began the realization of plans made last year for the department of Economics and Social Science. The required work in the elements of Economics is carried back into the Junior year, and the way thus opened for advanced work in the Senior and graduate years. The work for the current year consists of two courses in the principles of Economics,—one, two hours a week through the year, required of Seniors; one,

three hours a week the second half-year, required of Juniors, and a two-hour elective course in present economic problems, running through the year and open to Seniors.

It is expected that the range of work hereafter will be somewhat wider. There will be offered next year six courses: an elementary and an advanced course in economic science, a course in economic questions of the day, a course in finance, a course in statistics, and a seminary for original investigations.

PHYSICS.—A room about twelve feet wide and thirty-five feet long is now being fitted up in the basement of Judd Hall for part of the experimental work on respiration which Professors Atwater and Rosa have undertaken. The particular work to be carried on in this room in the immediate future will be done by Professor Rosa and Mr. C. A. Miller, Ph. B., Fellow in Physics. It is an investigation of a new form of air calorimeter, designed for measuring the entire quantity of heat generated in a given time by a living animal.

The following new courses in Physics, which were last year announced as in contemplation, are now being given:

1. *Mathematical Theory of Electricity*.—A course of lectures based upon Emtage's *Mathematical Theory of Electricity and Magnetism*, with the works of Maxwell, Mascart and Joubert, and others for reference.

2. *Theory of Alternating Currents of Electricity*.—A course for graduates. Fleming's Alternate Current Transformer is closely followed.

3. *Weekly Journal Meeting for Graduates*.—Articles from the current physical journals are reported and discussed.

CHEMISTRY.—I. During the present year those who elect Course V. of the last Catalogue will receive laboratory instruction in the preparation and purification of the compounds of carbon, and in the usual methods of elementary analysis. The work is designed to be supplementary to the regular course of lectures in organic chemistry, and is therefore elective for those only who are pursuing, or who have completed, Course IV.

II. Mr. Dains gives a course of lectures in applied chemistry. The subjects are treated largely from the standpoint of the chemical reactions involved, and include the alkali and acid industries, the manufacture of glass, porcelain, explosives, etc.

The course is open to all who have taken General Chemistry, and may not be continued beyond the present year.

III. Graduate work is being conducted along three lines of original investigation: 1. Study of the derivatives of Disalicylaldehyde, some results of which were published in the April number of the *American Chemical Journal*; 2. The action of sodium sulphide upon acetylene di-bromide; 3. The change produced in the coefficient of expansion of a liquid by the presence of a substance dissolved in the same.

BIOLOGY. The new course of one hour a week, upon Evolution, will review the general theories of Evolution, and will give an outline of the arguments ad-

vanced in its favor, and of its relations to science and to philosophical thought. This course, being given only in alternate years, is elective for both Juniors and Seniors.

At the request of the Agricultural Department in Washington, Professor Conn has consented to undertake the arrangement of an exhibit at the Columbian Exposition, in illustration of the work which has been carried on in the biological laboratory of the College, during the last three or four years, upon the relations of bacteria to dairying. This exhibit will consist of a working dairy and bacteriological laboratory combined, and is designed to show to farmers and dairymen the importance of the proper control of the bacteria cultures used in the ripening of cream. The production of what are known as blue milk, slimy milk, etc., through the growth of bacteria, and the measures necessary to prevent such action, will be illustrated by actual experiment. The chief feature of the exhibit will be the making of butter daily from cream which has been ripened by different species of bacteria. The exhibit will be open during the entire session of the Exposition, and will be under the immediate supervision of one of the students of the biological laboratory.

CHANGES IN THE COLLEGE BUILDINGS.

The College has suffered great inconvenience of late years from the lack of good class-rooms, especially such as are suitable for large classes and for the holding of examinations. This need has been met in part by the changes which have been made in South College during the summer. The ground floor of the building, originally occupied as the chapel, has been fitted up in modern style as a lecture room, with an ample equipment of black-boards and a seating capacity of 176. The upper floor, which has hitherto contained the only dormitory rooms in the building, has also been remodeled, and now affords offices for two instructors and a recitation room capable of seating 127.

As indicated in the last BULLETIN, the entire second floor of Judd Hall is now devoted to Natural History. The room formerly occupied by the department of Mathematics has been converted into a general biological laboratory, capable of accommodating twenty students, and equipped with the necessary tables, lockers, and electric lights, and with a chemical desk. Two rooms, formerly known as the Museum Annex, are now occupied respectively by a physiological laboratory and by the office of the Professor in charge. This office will be used also as a seminary and reading room. The room hitherto occupied as a general laboratory is now provided with all the apparatus necessary to the proper prosecution of bacteriological work. Photographic cameras and a dark room have also been supplied, for use in microscopic photography.

On the first floor of Judd Hall additional facilities for work have been provided to meet the growing needs of the chemical department. The number of hoods has been increased, and desks suitable for graduate work, as well as for the use of those who elect the new laboratory course in organic chemistry, have been supplied.

Changes in the basement of the same building are described in the notes from the department of Physics.

LIBRARY RULES.

I. General Rules of the Library.—1. The Library will be open every week-day in term time, except Saturday, from 8 A. M. to 1 P. M., and from 2:30 P. M. to 4:30 P. M. On Saturday in term time it will be open from 8 A. M. to 12 M., and from 1 P. M. to 3 P. M. During vacations and holidays, the Library will be closed, unless notice to the contrary is given.

2. The alcoves are open to all, but it is earnestly requested that books taken from the shelves be left upon the tables, and not replaced on the shelves.

3. Not more than three volumes at one time are allowed, except at the discretion of the Librarian, to borrowers not officers of the University.

4. Officers of the University may retain books borrowed from the Library for three months, but at the expiration of that period the books must be either returned or renewed.

5. Graduate students may retain books borrowed from the Library for one month, but at the expiration of that period the books must be either returned or renewed.

6. No borrower, not an officer of instruction or a graduate student, shall retain any book borrowed from the Library more than two weeks; but any borrower may renew a book for a second period of the same length by special permission of the Librarian.

The loan of books much in demand may be restricted by the Librarian to a period of seven days.

A fine of one cent per day will be charged on books retained over time.

7. Any person, on expressing his desire to obtain from the Library a book already lent, will be promptly notified of its return, and it will be held subject to his order for two days; and any borrower may be notified that a particular book held by him has been applied for, in which case it must be immediately returned.

8. Books may be taken from the Library only after one of the blank application forms has been filled out.

9. Borrowers will be held responsible for books until they are returned to the Library.

10. No borrower shall write or mark in a book belonging to the Library; and any damage to, or loss of, books shall be made good to the satisfaction of the Librarian.

11. The Librarian may withdraw from circulation all books designated by officers of instruction as needed for reference by their classes. These reserved books, and also current periodicals and books of reference in the Reading-Room, may be borrowed for use over night, but they must be returned as soon as the Library is next opened.

Unbound periodical publications, except the current numbers, may be borrowed, subject to the same regulations that apply to books, provided that in all cases unbound serials are subject to recall for binding.

The Librarian shall use his discretion in regard to the lending of works which are rare, costly, or unsuited for circulation.

12. Borrowers, not officers of the University, who leave Middletown for an absence of more than one week, must first return all borrowed books.

13. No student shall receive a certificate of progress or an honorable dismissal from college, or shall be recommended for a degree, until he has returned in good order, or replaced, every book that he has borrowed, and has paid all fines charged to him.

14. Infraction of the rules of the Library will subject the delinquent to a suspension of his privileges, or to such other penalty as may in each case be determined.

II. Rules Affecting Persons not Connected with the University.—1. All persons are allowed, subject to the foregoing rules, the use of the Library within the building, at the discretion of the Librarian.

2. Graduates of the University temporarily or permanently resident in Middletown have the same privileges as graduate students in regard to the use of the Library.

3. Any person who is known to be pursuing systematic investigations in any department of knowledge may be allowed the privilege of borrowing books from the Library, at the discretion of the Librarian.

COMMITTEE ON ATHLETICS.

The Faculty has intrusted the general supervision of College Athletics to a committee of three, consisting of W. J. James, (chairman), A. C. Armstrong, Jr., and E. B. Rosa, and has adopted the following rules:

1. No student shall play under an assumed name in any game with another team.

2. A student notably deficient in any department of study may be prohibited from playing in any contest with another team.

3. The manager of each athletic team shall submit to the Committee a schedule of all games before definite engagements are made.

RECENT GIFTS.

The following gifts for special purposes have been received by the College since the publication of the last BULLETIN:—

Six hundred dollars has been given by Mrs. P. L. Bennett, Wilkesbarre, Pa., Mrs. H. Scovil, Higganum, Miss Margaret S. Hubbard, Middletown, and others, toward furnishing the Women's Dormitory.

Messrs. Rogers Bros., of Meriden, have presented the College with a complete outfit of silver for use in the same building.

Mr. John E. Andrus, Treasurer of the Board of Trustees, has added to his other gifts to the College by assuming the payment of the expense incurred in fitting up the new recitation room on the ground floor of South College.

The condition made by the Trustees that work should begin on the new gymnasium only after \$25,000 should be subscribed in addition to the Fayerweather fund, has already been met, and the speedy erection of the building is therefore expected.

CALENDAR.

1892.

- Sept. 29, Thursday, 9:00 A. M.,—College Year began.
 Nov. 23, Wednesday, 12:00 M.,—Thanksgiving Recess will begin.
 Nov. 27, Sunday, 8:50 A. M.,—Thanksgiving Recess will end.
 Dec. 23, Friday, 5:00 P. M.,—Christmas Recess will begin.

1893.

- Jan. 4, Wednesday, 7:50 A. M.,—Christmas Recess will end.
 Jan. 26, Thursday,—Day of Prayer for Colleges.
 Feb. 13, Monday,—Feb. 18, Saturday,—Mid-year Examinations.
 Mar. 29, Wednesday, 5:00 P. M.,—Easter Recess will begin.
 Apr. 4, Tuesday, 7:50 A. M.,—Easter Recess will end.
 June 28, Wednesday,—Commencement Day.

—THE—

Wesleyan University Bulletin.

MIDDLETOWN, CONN.

MAY, 1893.—No. 12.

THE principal events of the College year that is soon to close are concerned with progress in the internal administration of the College rather than with its more material prosperity. No large additions have accrued to its endowment funds since the publication of the last BULLETIN, but a number of small gifts for general and for special purposes have been made, and a larger sum has been received in fees from students than in any previous year. But the increase in income, unfortunately, does not keep pace with the demands upon the treasury, due to the steady increase in the number of students in attendance, and to the continual advance in character of work that is absolutely necessary if the College would maintain the relative position heretofore occupied. The Freshman class of the present year is 27 per cent. larger than that of the year before, while the graduating class is 27 per cent. smaller than the class graduated last year. Any considerable increase, therefore, in the size of the class admitted to the College next September will effect a more considerable increase in the total number of students, as compared with the number of this year, and will force upon immediate attention some very serious questions of administration.

The Trustees, however, are confronting the impending problems in a very hopeful spirit. As the summary of their adjourned annual meeting, given in this BULLETIN, states, they have advanced to full professorships, with corresponding increase in salaries, three associate professors whose terms will expire at the approaching Commencement; have recognized the importance of the Library in modern college work by making the Librarian a member of the Academic Council, and by attaching to the position a salary equal to that of a full professor; and have not hesitated to authorize other additional expenditures for the coming year.

The litigation still pending in the matter of the will of the late Daniel B. Fayerweather renders impossible any final report on the condition of his bequest to this University. A statement of the progress made, however, in the matter of the Gymnasium which was to bear his name will be found elsewhere.

The lot on the south corner of College and High streets, so long in its unkempt condition an eyesore to the spectator from the College grounds, is now occupied by the completed chapter-house of the Xi chapter of the Psi Upsilon Fraternity. The building is a large and most substantial structure of Pompeian brick, with trimmings of brownstone, and forms a welcome addition to the group of student homes and to the buildings that beautify the surroundings of the Campus.

The changes in the requirements for admission, and in the adjustment of required and elective work in the Sophomore year, which went into effect with the opening of the current academic year, have approved themselves in actual working, to the extreme satisfaction of all concerned. Since the publication of the last BULLETIN, a scheme of Preliminary Honors, to be awarded at the end of the Sophomore or of the Junior year, in the departments of Classics and of Mathematics, has been adopted by the Faculty. A statement of its provisions will be found on pages 76 and 77 of the Catalogue for the current year. The general regulations promulgated by the Faculty have also been subjected to a thorough revision, and copies of the revised scheme will soon be ready for distribution to the students.

The Secretary of the Faculty expects to issue, before the approaching Commencement, the final daily program of lectures and recitations for the year 1893-94, accompanied by a brief statement of the courses of instruction offered for that year; and students will have an opportunity to announce their elections before the opening of the first term. In the case of certain courses, such announcement may be required as early as Commencement.

In accordance with a request preferred by the body of students, and following to some extent a precedent established in a few other colleges, the Faculty has constituted a Conference Committee of officers and students, to have purely advisory power in such matters as may be referred to it.

The student body will doubtless receive with interest the announcement of a notable change in the "marking system," and of the abolition of the Annual Examining Committee, which has not long survived the discontinuance of the Senior Examining Committee.

In addition to the lectures delivered before the College under the auspices of the Young Men's Christian Association, which are elsewhere mentioned, several members of the Faculty whose work lies in the departments of Language and Literature, have given each a public lecture in the College Chapel. These are mentioned individually under the heading of *Lectures and Publications by Members of the Faculty*.

The College has been called to mourn the death, during the present year, of three of her most liberal benefactors,—Mr. Orange Judd, Mr. George I. Seney, and Mr. Joseph S. Spinney. The death of Mr. Judd occurred before the mid-year meeting of the Board of Trustees, who adopted the resolutions of regret that are printed below. Mr. Seney and Mr. Spinney have but recently died, and the Trustees have not as yet been able to take any action in view of the event. The memory of all three will be held in reverence and affection at the University which they did so much to serve.

TRUSTEE MEETING.

The adjourned annual meeting of the Board of Trustees of Wesleyan University was held in New York City, March 6, 1893, with 23 members present.

Associate Professors Mead, Bradley, and Kuhns were promoted to full professorships in their respective departments, the appointments to take effect at the beginning of the next academic year.

The appointment of an Annual Examining Committee was discontinued, and in place thereof the Board resolved to appoint a Visiting Committee of five members, of whom at least three should be selected from the Board of Trustees, to visit the College at some time during the year, meet both instructors and students, and study the modes of work and the needs of the various departments. The Alumni Associations of New York and Boston were also invited, by resolution, to appoint Committees with similar duties, to report to the respective Associations.

[Three members of the Committee of the Trustees have already been appointed,—Samuel F. Upham, George H. Whitney, and Edmund M. Mills.]

The Faculty was authorized to make provision for securing the correction and continuance of record of such information regarding the Alumni of the University as was published in the last edition of the Alumni Record, and for the biennial publication of a full list of the Alumni with their addresses.

The Faculty was further authorized to make a charge not exceeding five dollars for each special examination, under regulations to be subject to the approval of the Executive Committee. [A statement of the regulations adopted will be found elsewhere in this BULLETIN.]

Rev. Azel W. Hazen, D. D., was reelected a Trustee for the term of five years, beginning in 1893.

The By-Laws were so amended as to divide the functions of the present Executive Committee between two bodies, a Local Executive Committee of 7 (to be identical in membership for the present year with the Executive Committee previously existing), and a General Executive Committee of 13, to consist of the members of the Local Executive Committee, and of 6 other members to be elected by the Board. The following were elected as the 6 additional members of the Committee: John E. Andrus, William Hoyt, William N. Ingraham, Stephen H. Olin, George G. Reynolds, and George West.

William Rice, Bradford P. Raymond, and Edward G. Andrews were appointed a committee to represent the interests of Wesleyan University in the matter of the will of the late Horace Smith, of Springfield, Mass., who left a considerable residuary estate in the hands of three trustees, to be distributed for charitable or religious purposes among such institutions as they might select.

The following minute was adopted concerning the death of Orange Judd:

"*Resolved*, That we have learned with deep sorrow of the death, since our last meeting, of our late associate, Orange Judd. We have a grateful recollection of his many years of devotion and efficient service as trustee. By the publication of the first edition of our *Alumni Record* at his own expense, in the preparation for which he gave very much personal care and labor, he made every alumnus of the University his debtor.

"By his princely contributions to our college properties of the Orange Judd Hall, he demonstrated his great love both of Science and of his Alma Mater, and became justly entitled to have his name recorded and remembered among the honored founders and benefactors of Wesleyan University.

E. G. ANDREWS,	} <i>Committee."</i>
J. E. KING,	
D. W. NORTHROP,	

RECENT GIFTS.

The late Mr. Joseph S. Spinney, long a Trustee and liberal benefactor of the University, leaves a considerable estate, from which Wesleyan University is to receive \$25,000 upon the death of the testator's sister, and also one-third of the entire residuary estate after the payment of certain specified legacies. At the present writing it is impossible to make any estimate of the total amount of the bequest.

By the will of the late Mr. Elliot J. Peck, of Stratford, Conn., of the class of 1851, the University receives one thousand dollars.

Gifts for the purpose of adding to the furniture of the Women's Dormitory have been made by Mrs. J. D. Slayback and Mrs. Bowles Colgate, of New York City, and Dr. and Mrs. Ira E. Chase, of Haverhill, Mass.

In addition, Mrs. H. A. Starks, of Middletown, and her sister, Mrs. J. W. Cusack, of Troy, N. Y., have together presented a complete set of bedroom furniture for the Matron's room.

DEPARTMENT NOTES.

LATIN.—The attention of students is especially called to the new scheme for the award of Preliminary Honors in Classics, a statement of which is to be found on pp. 76 and 77 of the Catalogue for the current year. It will be noted by prospective candidates for Final Honors in Latin in 1895, that they must win Preliminary Honors in Classics in 1893 or 1894, and according to a recent regulation of the Faculty, notice of candidacy for Final Honors in Latin must be given as early as the beginning of the Junior year.

In accordance with the re-arrangement of the elective courses carried into partial effect this year, the courses given next year will be as follows:—

I. Livy. Books I. and II., *4 (1st half-year)*; work of the second half-year as at present.

II. Horace. Odes and Epodes, *2 (1st half-year)*; Cicero, Selected Letters, *2 (2nd half-year)*.

III. Pliny the Younger, Selected Letters, *2 (1st half-year)*; Tacitus, Agricola and Germania, *2 (2nd half-year)*.

IV. Lucretius, Books I. and III., and selections from the other books, *2 (1st half-year)*; Catullus, *2 (2nd half-year)*.

VI. A course in Roman Satire, embracing Ennius, Lucilius, and Horace, Selections, *2 (1st half-year)*; Petronius, Persius, and Juvenal, Selections, *2 (2nd half-year)*.

Courses IV. and VI. will be omitted in 1894-95, and Course V. (including selections from the Annals of Tacitus, and from the Elegiasts) given.

It will be noted that under the new regulations Courses IV.-VI. are elective for those who have taken Course I., and either Course II. or Course III. Election of Courses IV. or VI. should be announced to the Instructors before Commencement, that the necessary text-books may be imported during the summer.

VII. Latin Prose Composition, as at present.

X. Roman Private and Social Institutions. This course is now open to all students.

XII. The Latin Seminary. The work for the year 1893-94 will be upon Catullus. Applications for membership must be made to the leader before Commencement.

Under the new regulations concerning Special Honors, candidates in Latin may omit, at their option, one of Courses II.-VI., but are advised not to avail themselves of this privilege.

ROMANCE LANGUAGES.—A course on the literature of France during the period of the Renaissance will be given next year. Those who contemplate electing this course, or the course in Italian, must announce such intention to the instructor before June 15, in order that the necessary books may be imported during the summer.

The following books have been read this year by the class in II. French, in addition to those mentioned in the Catalogue:—Souvestre, *Un Philosophe Sous*

les Toits, Rougemont, La France, and Part I. of Boiëlle's adaptation of *Les Misérables*.

A room in South College will be fitted up next year as a Seminary room, and a collection of books will be brought together from the College Library and from the private library of the professor, for the use of members of the advanced classes.

ENGLISH LANGUAGE.—Freshmen electing Course I. B, will next year read several of Macaulay's Essays, together with illustrative extracts from the authors discussed in the Essays.

A course in the Anglo-Saxon Chronicle, elective for students who have taken Course IV., will be given next year. The class-room work will be supplemented by lectures and collateral reading in the sources of old English history.

ECONOMICS.—Hereafter the departments of Economics and History will be separated in the award of special honors at graduation. Next year the courses required of candidates for special honors in Economics and Social Science will be:

1. All the courses, required and elective, in Economics and Social Science.
2. Courses I., II., and III., in History.

PHILOSOPHY.—The subject of the course for honors in 1893-94 will be Modern Psychology, with special attention to its recent developments and the positions of the several psychological schools. James's *Principles of Psychology* will be the treatise selected for detailed study, with collateral work in other of the newer works as Höffding's *Outlines of Psychology*, Sully's *Human Mind*, Wundt's *Menschen- und Thierseele* (2nd ed., translated by Titchener and Creighton). In addition, the investigation of special psychological problems will be undertaken, as far as the opportunities and resources of the department may allow. The class will meet for recitation and discussion at times to be determined at the beginning of the first term. Besides students applying for honors, a very few others may be admitted to the class on special application and on the presentation of evidence of their fitness for the course.

PHYSICS.—Course I. will be given four times a week during the first term of the next year; twice a week during the second and third terms. During the first half-year it will be conducted by Professor Rosa, the subjects covered being Mechanics, Heat, and Electricity; during the second half-year, by Professor Crawford, the subjects covered being Sound and Light.

Course III., on Heat and Electricity, will be conducted throughout the entire year by Professor Crawford.

Courses IV., V., and VI., will be omitted.

A course of one hour a week in Preston's Theory of Light will be offered by Professor Crawford, in continuation of Course V. of the present year.

Professor Rosa will repeat Course X. of the present year, on Alternating Currents of Electricity, and will give either Course IX., on the Mathematical

Theory of Electricity, or a more advanced course, according to the demands of the students electing it.

The courses not here referred to will be given as during the present year.

The calorimetric measurements referred to in the last BULLETIN, under the direction of Professors Atwater and Rosa, to study the law of the conservation of energy as applied to the actions of the human body, have been continued through the year, the detailed observations having been made chiefly by Mr. C. A. Miller, Fellow in Physics. Successful preliminary experiments made during the first and second terms have led to the construction of a large and improved respiration-calorimeter, the details of which are now being completed.

CHEMISTRY.—Professor Atwater has spent a portion of the year in Europe, and has secured several pieces of apparatus for use in calorimetric studies of organic substances, and for the investigations into the conservation of matter and of energy referred to in the notes from the department of Physics.

Dr. H. B. Gibson, who passed the academic year 1891-92 in the University of Leipsic, taking there the degree of Ph. D., has returned to Middletown, and has been engaged during the present year under the direction of Professor Atwater in the investigation of the chemistry of food and dietaries, which has been in progress for some time past in coöperation with the U. S. Department of Labor.

GEOLOGY.—Specific announcements of the courses in this department will be given in the pamphlet containing the courses of study for next year, which will be published this spring by the secretary of the Faculty.

BIOLOGY.—A course of lectures on bacteriology, to be given once a week, will be offered as an elective study for Juniors next year.

Work in microscopic photography has been carried on by some of the members of the Practical Biology class during the present year.

The Biological Laboratory of the Brooklyn Institute will hold its fourth summer session during the coming July and August. The laboratory will again be under the direction of Professor Conn. A. N. Johnson, '84, now of the University of Michigan, will conduct a course in cryptogamic botany. A. L. Treadwell, '88, Professor of Biology in Miami University, and Mr. D. S. Johnson, '92, Assistant in Biology in Wesleyan University, will be associated in the instruction in zoölogy. The school will occupy a new building erected during the present year for its special use, and will have increased facilities in other directions. Special attention will be paid to work in bacteriology. Work at this summer school will be accepted in place of part of the practical biology course at Wesleyan, or will be counted toward special honors in biology.

An exhibit at the World's Fair, under the direction of the U. S. Department of Agriculture, has been prepared by Prof. Conn, to show the influence of different species of bacteria in the ripening of cream for churning, the details of which were outlined in BULLETIN No. 11. It is now under the charge of Mr. W. M. Esten of the Junior class, who has been granted a leave of absence for this purpose.

LECTURES AND PUBLICATIONS BY MEMBERS OF THE FACULTY.

PRESIDENT RAYMOND.—Two lectures before the Drew Theological Seminary on Modern Philosophy and the Supernatural; Our Ideals and Theism.

Lecture before the Brooklyn Institute on Essentials of a Liberal Education, January, 1893.

Address before the New York State Convention of the Young Men's Christian Association, at Saratoga, N. Y., on the Relation of the Young Men's Christian Association to the Church.

PROFESSOR VAN BENSCHOTEN.—Lecture on Recent Excavations in Greece, in College Chapel, May 4, 1893.

PROFESSOR RICE.—Twenty-five Years of Scientific Progress. *Bibliotheca Sacra*, vol. I., January, 1893 (being his address, delivered in December, 1891, as President of the American Society of Naturalists).

The Seven Mountains, *Zion's Herald*, December 7, 1892.

A Day on the Snow, *Zion's Herald*, February 15, 1893.

PROFESSOR ATWATER.—The Chemical Composition of Food Fishes and Aquatic Invertebrates. 192 pp., 8 plates; in Report of U. S. Commission of Fish and Fisheries, published in 1892.

The Fixation of Atmospheric Nitrogen by Plants. W. O. Atwater and C. D. Woods. Report of Storrs Experiment Station for 1892.

The Food of the Coming Man. *The Forum*, June, 1892.

Economy of Food. Report of Storrs Experiment Station, 1892.

Sundry Articles in the Experiment Station Record.

Address, Ueber einen internationalen Austausch von Resultaten der Naturwissenschaftlichen Forschung. Berlin. Versammlung des Verbandes der Versuchsstationen im Deutschen Reich. December, 1892.

Lecture on the Chemical Composition and Potential Energy of Food, at the Pratt Institute, Brooklyn, March, 1893.

Sundry other addresses.

PROFESSOR WINCHESTER.—Lectures before various colleges and societies, of which the principal are:—

A course of six lectures in Brown University, Providence, R. I.

A course of six lectures in Smith College, Northampton, Mass.

One lecture in Amherst College.

A course of five lectures in Wells College, Aurora, N. Y.

A course of five lectures before the University Extension Society of Paterson, New Jersey.

A course of three lectures in Wilkes-Barre, Pa.

An address at the annual convention of the Massachusetts division of the Epworth League, in Worcester, October 7, 1892. Subject, The Bible as Literature. (Printed in *Zion's Herald* for October 12, 1892.)

Various other single lectures and addresses.

Lecture on Shakspeare as a Man, in the College Chapel, February 7.

Professor Winchester is also joint editor with Professor George Lyman Kittredge, of Harvard University, of the *Athenium Press Series*. According to the published announcement, "This series is intended primarily for use in colleges and higher schools; but it will furnish also to the general reader a library of the best things in English letters in editions at once popular and scholarly. The works selected will represent, with some degree of completeness, the course of English literature from Chaucer to our own times." Two volumes have already appeared, and a considerable number of others are in preparation.

PROFESSOR CONN.—The Isolation of Rennet from Bacteria Cultures (*Fifth Annual Report of Storrs Experiment Station, for 1892.*)

A preliminary report had already appeared in *Centralblatt für Bakteriologie und Parasitenkunde*, August, 1892, and in *Science*, November 4, 1892.

Improved Machine for Pasteurizing Milk. *American Agriculturist*, August, 1892.

Free Nitrogen Assimilation by Plants. *Bulletin of Torrey Botanical Club*, April, 1893.

Lecture on Marine Biological Laboratories, at Brooklyn Institute, November 29, 1892.

Lecture on What is Churning? Before Connecticut Board of Agriculture, New Haven, December 20, 1892.

Lecture on Hostile Bacteria, before the Torrey Botanical Club, Columbia College, New York, December 28, 1892.

Lecture on Bacteria on the Farm, at Colchester, Conn., January 27, 1893, and at Ashby, Mass., February 17, 1893.

Lecture on Danger in Interfering with the Natural Distribution of Plants and Animals, in South Congregational Church, Middletown, February 27, 1893.

Lecture on Methods of Defense Among Animals, in chapel of Episcopal Church, Middletown, March 16, 1893, and at New Hampshire Conference Academy, Tilton, N. H., April 14, 1893.

Course of five lectures on Bacteria, given at the Storrs Agricultural School.

PROFESSOR MERKILL.—An edition of Catullus, with a new collation of the text, and a commentary, critical appendix, and indexes, in the College Series of Latin Authors, Ginn & Co., Boston and London, 1893; 50 and about 300 pp., 12mo.

An address on Some Aspects of Preparatory Work in Latin, before the Connecticut State Teachers' Association, at Meriden, October 28, 1892.

An illustrated lecture on Some Old Roman Stories, at Middletown, March 9, 1893, and at South Farms, March 20, 1893.

A lecture on A Pair of Roman Poets (Lucretius and Catullus), in the College Chapel, April 6, 1893.

PROFESSOR ARMSTRONG.—Translation of Falckenberg's History of Modern Philosophy. Part I., Nicolas of Cusa to Kant, pp. 314.

PROFESSOR MEAD.—Books and Reading in Iceland, *Atlantic Monthly*, February, 1893.

Lecture, illustrated by lantern slides, on A Summer in Iceland, in the College Chapel, May 11, 1893.

PROFESSOR STEPHENSON.—Lecture on Morals in Politics, the Measure of Progress, delivered before the Reform Club, Middletown, November 20, 1892; before the Mattabessett Lodge, O. U. A. M., of Middletown, December, 1892; at the First M. E. Church, Hartford, January 8, 1893; before the Civic Improvement Society of Hazardville, February 9, 1893.

Course of three lectures before the Young Men's Christian Association of Middletown: Our National Growth as Marked by Territorial Expansion, February 14, 1893; Some Phases of Our Government, State and National, February 21, 1893; The Duties of Franchised Citizenship, February 28, 1893.

MR. NICOLSON.—The Use of *Hercle*, *Edepol*, and *Ecastor* by Plautus and Terence. *Harvard Classical Studies*, vol. iv.

Lecture on Sanscrit Literature, in the College Chapel, February 21, 1893.

PROFESSOR BRADLEY AND MR. DAINS.—Action of Acetyl Chloride on Orthohydroxy-aldehydes. *American Chemical Journal*, April, 1892.

PROFESSOR KUHN.—Lecture on Dante Alighieri and the Vita Nuova, in the College Chapel, March 21, 1893.

Two lectures under the auspices of the University Extension Society, delivered in Hosmer Hall, Hartford; one on the Romantic Movement in French Literature, and one on François René de Chateaubriand.

DR. EICHELBERGER.—Two lectures on Astronomy before the Young Men's Christian Association, Middletown, March 7 and 14, 1893.

PROFESSOR ROSA.—Two lectures on the Electric Motor, before the Young Men's Christian Association of Middletown, March 21 and 28, 1893.

University Extension Course of six lectures on Electricity at Hosmer Hall, Hartford, Conn., during March and April, 1893.

DR. GOODWIN.—Lecture on Plato and the Ideal State, in the College Chapel, March 7, 1893.

PROFESSOR FISHER.—Course of three lectures on the Silver Question, before the Young Men's Christian Association of Middletown, January 24 and 31, and February 7.

THE MASTER'S DEGREE.

The general regulations under which the Master's degree in Arts or in Science is awarded by Wesleyan University are stated on pp. 81 and 82 of the Catalogue for the year 1892-93. A few additional facts are here given for the information chiefly of prospective candidates for the degree *in absentia*.

All prospective candidates for the Master's degree should address themselves in the first instance in writing to the Secretary of the Committee on Graduate

Instruction, Professor Merrill, and should state in what department or departments they wish to study, and what specific subjects in those departments they would prefer to take up. Work may be carried on in one department, or in more than one; but the Committee recommends that it be undertaken in not more than two departments, and that the work in these show some natural connection throughout. In case of work thus divided, the applicant is requested to specify the proportion in which he would prefer to apportion his study between the two departments.

On receipt by the Secretary of an application containing the statements requested above, the candidate will be put into communication with the heads of the department, or departments, in which he proposes to study, and his course of study will be laid out by them on consultation with him and with the Committee, who will also fix the number, scope, method, and approximate dates of examinations. No scheme of fixed courses of study is laid out by the Committee from which a choice may be made, but the work of each candidate is adjusted in accordance with his special circumstances.

When the course of study has been approved and filed by the Committee, the candidate will receive an official copy thereof from the Secretary. At least two weeks before presenting himself for any examination, the candidate should notify the Secretary of his intention so to do, and will receive from him information concerning the specific date and place. All examinations of non-resident, as well as of resident candidates, are conducted at the University. Questions for further information may be addressed at any time to the Secretary of the Committee.

CHANGES IN THE REGULATIONS.

All standings are hereafter to be reckoned according to five numerical grades. The award at graduation of two grades of honor in general scholarship is to be retained substantially as heretofore, but with such changes in the method of computation as are made necessary by the abandonment of the more detailed system of marking previously in use.

Students may hereafter obtain final reports of their examinations twice a year, ten days after the close of the mid-year examinations, and on the Monday preceding Commencement, and reports of their grades within a brief period after these respective dates.

Absences from classes at the beginning of the college year due to deficiencies in rhetorical exercises of the previous year, or to entrance conditions not made up, are no longer to be considered excusable in the application of the rule concerning exclusion from examinations.

The number of opportunities offered for passing by special examinations in studies in which a student is deficient by absence or by failure to pass, has been reduced, and a fee has been imposed for every special examination in the case of a student who is excluded from any regular examination, or is absent from the

same without excuse, and for every special examination after the first (and this must be at the stated time in May or September) in the case of absence with excuse from any regular examination, or failure to pass in the same.

A student whose unexcused absences from prayers and public worship in any term exceeds fifteen per cent. of the whole number will be admonished by the President, and if his absences during the following term exceed ten per cent., he will receive the censure of the faculty.

A student who, at the close of the special examinations in September and October, is deficient by an amount equivalent to six or more hours' work per week for a year (instead of half a year's work as heretofore) will be ranked with the next lower class.

THE NEW GYMNASIUM.

The Building Committee, appointed by authority of the Board of Trustees, consists of President Raymond, Professor Van Vleck, and Messrs. S. H. Olin, S. T. Camp, and D. W. Northrop. This Committee has selected Mr. J. E. Cady, the well-known architect of New York, who has already built several very satisfactory edifices in Middletown, to design and supervise the new structure. In connection with Mr. Cady, the Committee has carefully studied the plan and construction of similar buildings elsewhere, especially of the gymnasiums of Harvard, Yale, and Brown Universities, and of Amherst College, and has called into consultation Drs. Sargent and Anderson, directors of the gymnasiums of Harvard and Yale respectively. Plans have been carefully prepared by the architect, and are now about to be adopted.

The site chosen for the new gymnasium is the extreme north-east corner of the former foot-ball field. The building will cover an area of about ^{130 x 45} ~~90 x 40~~ feet, with the long dimension parallel to Wyllys Avenue. The main facade, however, will be not toward the street, but toward the Campus, making this the first of the chief College buildings to conform to the plan of a quadrangle. The material of the exterior walls is to be brick. The building will be two stories in height above the basement, and will contain, beside the main hall for exercise, a base-ball cage, a bowling-alley, special rooms for exercise in boxing and wrestling, a laundry, bath-rooms with accompanying dressing-rooms, and about 200 individual lockers for regular patrons, and the necessary offices for the Director, for physical measurements, and for the other business of the gymnasium. Provision has been made for the construction of a rowing-tank in an annex to the main building, and for the future extension of the main building to accommodate it to the growth of the College. It is expected to put a competent Director in charge, and possibly to require from all students a certain amount of physical exercise during the first part of the College course.

The estimated expense of the building and equipments is about \$50,000. The continued litigation over the proposed gifts of the executors of the will of the late Mr. Fayerweather will doubtless make necessary an appeal to the friends of the College for \$25,000 in addition to the subscriptions already made.

SUPPLEMENT TO THE ALUMNI RECORD.

The Board of Trustees, at their last meeting, authorized the publication of a partial supplement to the *Alumni Record*. Circulars have recently been sent to all the graduates of the College, asking for complete records of their lives since graduation, and answers have already been received from a large number. In connection with this work, information is requested as to the whereabouts of the following graduates. Addresses should be sent to F. W. Nicolson, Box 3 A, Middletown, Conn.—Robert McGonegal, '48; John H. Smith, '49; William S. Taggart, '49; William H. Fanton, '55; William R. Carr, '60; George W. Warner, '61; Coleman C. Burr, '65; R. Newton Crane, '67; William A. Munson, '67; Theodore M. House, '68; Michael H. Perry, '68; John P. Bronk, '75; Henry E. Briggs, '79.

CHANGES IN NORTH COLLEGE.

By the generosity of the Treasurer of the University, Mr. John E. Andrus, the interior of North College is to be entirely remodeled during the approaching summer vacation. The lower halls are to be finished in paneled oak, the upper in ash, with floors of maple, the rooms are to be arranged so as to furnish some suites as well as single rooms, and are to be finished in ash with oak floors, and the building when completed, will meet all the requirements of a convenient and comfortable dormitory of modern equipment.

YOUNG MEN'S CHRISTIAN ASSOCIATION.

The real beginning of the annual work of the Association was at the summer conference at Northfield, which was attended by eighteen men from Wesleyan University. Early in the first term a well-attended reception was given to the Freshman class, followed by an active canvass by the Membership Committee, resulting in 75 of the 76 men in the class becoming members of the Association, making the total membership 195,—168 active and 27 associate,—out of the 216 men in College. About 60 men have been engaged in neighborhood work, 32 of them regularly. The Association supported two of its members in mission work in New York City through the Summer. In addition to its regular work, there have been two especially prominent features of activity on the part of the Association during the year. The first of these has been a canvass for a building to cost \$30,000. Subscriptions amounting to \$9,370 have been secured, of which \$7,500 has been pledged by the students themselves. Another feature has been a course of public lectures, which has been more than usually successful. Among the speakers have been the following: Rev. F. C. Iglehart, D. D., of New York; Mr. Alexander F. Irvine, New York; Rev. A. J. F. Behrends, D. D., of Brooklyn; Rev. Merritt Hulburd, D. D., of Philadelphia; Rev. Dr. John Hall, of New York; Mr. J. L. Gordon, of Boston; Rev. R. S. MacArthur, D. D., of New York. Other speakers outside of the course have been Mr. J. W. Dean, an evangelist

of the Society of Friends, of New York; Mr. R. F. McFadden, of the Brooklyn Y. M. C. A.; and Rev. Mr. Fennell, of Meriden. The expenses of the Association, including the support of men in City Missions, will amount this year to over \$700, and are met almost entirely by subscriptions from the students.

MIDDLETOWN SCIENTIFIC ASSOCIATION.

The following papers have been read at the meetings of the Middletown Scientific Association since the last report in the BULLETIN:

June 14.—Views of Middletown, taken by the Camera Section. E. R. Knowles; Alternating Currents. E. B. Rosa.

Oct. 11.—Papers on current scientific topics by H. W. Conn, W. P. Bradley, C. D. Woods, W. S. Eichelberger, F. B. Dains.

Nov. 15.—One Phase of the Nitrogen Question. H. B. Gibson; Astronomy at the Recent Session of the American Association. J. M. Van Vleck.

Dec. 13.—The Physics of Solutions. E. B. Rosa.

Jan. 10.—Fifty Years of Biological Science (annual address of the President). H. W. Conn.

Feb. 14.—The Chemical Elements, Their Relations to Each Other, and Their Composition. W. P. Bradley; Geological Classification. L. G. Westgate.

March 14.—Some Discoveries of Modern Surgery. John E. Loveland; The Electric Search Light. E. R. Knowles.

April 11.—Microscopic Changes in Nerve Cells. C. H. Judd; The Prevention of Cholera. H. W. Conn.

The officers of the Association report an increased interest in the meetings on the part of those, both in College and town, whose main interests are not in the line of scientific studies. This is the more gratifying, since it is one of the desires of the Association to make its discussions of a popular character.

RECENT COLLEGE APPOINTMENTS.

Class of 1870.—Benjamin Gill, Professor of Latin, Pennsylvania State College.

1881.—William Wesley McGilton, Professor of Physics and Astronomy, Middlebury College.

1882.—Henry Seely White, Assistant Professor of Mathematics, Northwestern University.

1884.—Lorenzo Nickerson Johnson, Instructor in Botany, University of Michigan.

1888.—Frederic Gibbs Axtell, Professor of Latin and Greek, Chaffey College, Ontario, Cal.

1888.—John Law Bridge, Fellow in Chemistry, University of Chicago.

1889.—William Emory Smyser, Instructor in Rhetoric and English Literature, De Pauw University.

Class of 1889.—Mary Graham, Fellow in Ethics and Philosophy, Yale University.

1890.—Stockton Axson, Instructor in English, University of Vermont.

1890.—Frederic Samuel Goodrich, Professor of Greek, Albion College.

1890.—Lewis Gardiner Westgate, Assistant in Physical Geography, Wesleyan University.

1892.—John Hendley Barnhart, Assistant in Museum, Wesleyan University.

1892.—Samuel James Allen Connor, Professor of Mathematics, University of Southern California.

1892.—Pedro Gillot, Squire Scholar, resident in Heidelberg, Germany.

1892.—Duncan Starr Johnson, Assistant in Biology, Wesleyan University.

1892.—Charles Allison Miller, Fellow in Physics, Wesleyan University.

1892.—Everett Hallerton Scott, Assistant Librarian, Wesleyan University.

JUNIOR EXHIBITION.

The annual Junior Exhibition was held on the evening of Thursday, April 20. The Committee of Award were Rev. Edward C. Acheson, M. A., of Middletown; Mr. Elmer G. Derby, M. A., of Middletown; and Mr. Frederick B. Hartranft, of Hartford. The first prize was awarded to Frederic Lawrence Knowles, of Tilton, N. H., who discussed "The Religious Spirit of Robert Browning;" the second prize, to Charles Wesley Delano, of Worcester, Mass., whose subject was "The Value of the Classics in a College Education." Honorable mention was made of Charles H. Judd.

THE WORLD'S FAIR.

In consequence of a misunderstanding about the terms of application, Wesleyan University was unable to obtain space for any exhibit at the World's Fair, with the exception of that mentioned in the note from the Department of Biology.

Alumni or students of the College who visit Chicago during the period of the Fair are earnestly requested for the sake of mutual information to register their names at the office of the American Bureau of College Publications, 1519 Masonic Temple, or between July 17 and 24, at the World's Congress Auxiliary Headquarters, Art Institute.

CALENDAR.

1893.

- June 8, Thursday, 7:30 P. M.,—Junior Prize Debate and Freshman Prize Declamations.
- June 23, Friday, 7:30 P. M.,—Junior and Sophomore Prize Declamations.
- June 25, Sunday, 10:30 A. M.,—Baccalaureate Sermon, Rev. Bradford Paul Raymond, D. D., LL. D.
- June 25, Sunday, 7:30 P. M.,—University Sermon, Rev. J. A. M. Chapman, D. D.
- June 26, Monday, 11:00 A. M.,—Public Awarding of Prizes.
- June 26, Monday, 2:00 P. M.,—Class Day Exercises.
- June 26, Monday, 8:00 P. M.,—Glee Club Concert.
- June 27, Tuesday, 9:00 A. M.,—Annual Meeting of the Trustees.
- June 27, Tuesday, 9:00 A. M.,—Meeting of the Φ. B. K. Fraternity.
- June 27, Tuesday, 10:00 A. M.,—Business Meeting of the Alumni Association.
- June 27, Tuesday, —Reunion of Classes of 1843, '63, '78, '83, '86, '89, and '90.
- June 27, Tuesday, afternoon, —Receptions by the College Fraternities.
- June 28, Wednesday, 10:00 A. M.,—COMMENCEMENT.
- June 28, Wednesday, afternoon, —Commencement Dinner.
- June 28, ~~Thursday~~ ^{Wednesday}, evening, —Reception by the President.
- June 29, Thursday, 9:00 A. M.,—Examination of candidates for admission.
- Sept. 27, Wednesday, 9:00 A. M.,—Examination of candidates for admission.
- Sept. 28, Thursday, 9:00 A. M.,—First Term begins.

—THE—
Wesleyan University Bulletin.
MIDDLETOWN, CONN.

NOVEMBER 1, 1893.—No. 13.

THE most noteworthy change in the externals of the College since the issue of the last BULLETIN is the transformation of old North College. The Alumnus accustomed to the prison-like appearance of its whitewashed brick-walled corridors, and its bare and dingy rooms, if he should now be suddenly set down inside it, would hardly know where he was. Truth to say, the interior of North College used to be enough to repel any student who came here fresh from the comforts of home or of a well-appointed school; and it was a most wise as well as generous thought of Mr. Andrus to give to it such an inviting and home-like appearance. It is now in effect a modern building, finished throughout in a substantial and even elegant manner.

The long expected gymnasium is also here. Work upon it is being pushed steadily forward, and it will probably be roofed in by the first of December. It promises to be not only a very commodious and well equipped building, but an architectural ornament to the campus.

Owing principally, no doubt, to the present financial stringency, the Freshman class entering college this fall is somewhat smaller than the very large class of last year; it numbers seventy-four—almost exactly the same number as in the class entering two years ago. The whole number of students at present on the college rolls is 272, one more than last year.

The opening weeks of the college year are saddened by the news of the death of Professor George Prentice. Professor Prentice had occupied a chair in the Faculty of the college for more than twenty years, and no man on the Faculty was more respected or beloved, especially in these later years of his sorrow and ill-health. His death brings to many in the college community a keen sense of personal loss.

It is hardly possible that new editions of a work so elaborate and costly as the *Alumni Record* of 1873 and 1883 can be frequently issued. Meantime, the excellent supplement prepared during the past year by Mr. F. W. Nicolson, Tutor in Latin, will be very welcome to all Alumni. It is edited with the same care that characterized the former editions of the *Record*, and it is believed that it will be found a trustworthy guide to the present position and occupation of our Alumni.

All such further information received from the Alumni as it was not possible to include in so brief a supplement, has been carefully compiled and copied so as to form a record in manuscript. This record is arranged on cards in such a manner that it can be readily consulted, and that modifications or additions can be conveniently made. It is hoped that it may be permanently kept up.

The suggestive résumé of facts and figures with reference to the Alumni, compiled by Mr. Nicolson from the *Record*, is printed on a later page of this BULLETIN. It may be mentioned here as an incidental indication of the prominence of our Alumni in various important departments of knowledge, that out of the thirteen American officers on the International Committees of Award at the Chicago Exposition, four are graduates of Wesleyan:—Professor W. O. Atwater, '65, (Chairman) Foods and Food Products; Professor H. S. Carhart, '69, Michigan University, (Chairman) Electricity; Joseph D. Weeks, '69, (Secretary) Mining Industries; G. Brown Goode, '70, Curator of the National Museum, (Chairman) Anthropology.

One of the objects of THE BULLETIN, as stated in its first issue, four years ago, is to secure from our Alumni "a more constant, intelligent, and hearty coöperation in all that pertains to the interest of the college." Is it not possible that something more might be done in furtherance of an end so much to be desired? No college has a more loyal body of Alumni than Wesleyan; in proportion to the number of its Alumni, no college has more men occupying positions of influence, civil or religious. It is a fair question whether this loyalty and this influence can not by some means be brought more thoroughly into the service of *Alma Mater*, and the *esprit de corps* of the whole body of Alumni be quickened and made more effective. It is nearly time for the annual meetings of the various Wesleyan University clubs. Might not something be done to secure an unusually large attendance at these meetings? And might not the clubs perhaps do something more than eat a dinner in honor of their *Alma*

Mater. To appoint a special committee with reference to some particular need of the college; to invite a full and careful presentation, at their meeting, of some subject connected with the work or plans of the college; to found one or more scholarships for the support of students, graduate or undergraduate; to secure the endowment of an alcove in the long-suffering library; to appoint a committee who should inquire how many young men in the churches, Epworth League clubs, or other young people's associations within a certain district, are preparing for Wesleyan, and why there are not more—these are samples of things that similar Alumni clubs are doing for other colleges, and that our own Alumni might readily and gladly do for Wesleyan.

NOTES OF THE LAST COMMENCEMENT.

TRUSTEE MEETING.—The Annual Meeting of the Board of Trustees was held in Middletown, June 27, 1893, with thirty members present.

Announcement was made of the election by the Troy Conference of Rev. Joel O. Sherburn, '73, and by the Northern New York Conference of Rev. Henry W. Bennett, '62, as Trustees to fill vacancies caused by the expiration of the terms, respectively, of Rev. Leonard L. Beeman, '75, and Rev. Melvin D. Kinney, '60.

The following Trustees, whose terms expire in 1894, were reelected for another term of five years: William Hoyt, Bowles Colgate, Samuel T. Camp, Phineas C. Lounsbury, Mark Hoyt. The following were added to the group of Trustees whose terms expire in 1895: Bishop Edward G. Andrews, D. D., LL. D., '47, Rev. Joseph E. King, D. D., '47, Rev. William V. Kelley, D. D., '65. To succeed Orange Judd, '47, and Joseph S. Spinney, deceased, whose terms would have expired in 1897, the Board elected Roswell S. Douglass, '61, and James H. Alexander.

The President of the University was authorized to confer the following honorary degrees: The degree of Doctor of Divinity upon Rev. Henry W. Bennett, '62, of Potsdam, N. Y., Rev. Charles F. Rice, '72, of Cambridge, Mass., and Rev. Marcus Lorenzo Taft, '73, of Peking, China; the degree of Doctor of Laws upon Professor Henry S. Carhart, '69, of the University of Michigan.

The following appointments were made on the Board of Instruction: Andrew Stephenson, Ph. D., to be Associate Professor of History for another year; Frank W. Nicolson, A. M., to be Tutor in Latin a third year; Charles J. Goodwin, Ph. D., to be Tutor in Greek a second year; William S. Eichelberger, Ph. D., to be Tutor in Mathematics and Assistant in Astronomy a fourth year; Samuel W. Loper, M. A., to be Assistant in the Museum; Albert E. Loveland, B. A., to be Assistant in Biology; Frederic Cutts, B. A., to be Assistant in Physics; Olin F. Tower, B. A., to be Assistant in Chemistry; Olin S. Blakeslee, to be Mechanician a third year.

By unanimous vote, the Trustees signified their acceptance of, and consent to, the provisions of the Act of the Connecticut State Legislature amending the

Charter of the University so as to allow absent Alumni to cast their ballots in the election of Alumni Trustees, under such regulations as the Board of Trustees may prescribe.

The Board authorized a plan, suggested by President Raymond, of securing new and endowed scholarships, the income of which, paid in cash, shall be used for the aid of needy students.

It was voted to limit the amount of free tuition to the sum of \$12,000.

The recommendation that Professor Prentice be given a year of rest, and that a Tutor be provided to take the work of his German classes, was approved by the Board. [Since the Annual Meeting, Mr. Arthur W. James, '88, has been appointed Tutor in German.]

The Committee on Memorials presented the following minute, which was adopted by the Board:

"Since our last meeting one of our number, Joseph S. Spinney, has departed this life, sincerely regretted by a large circle of acquaintances as well as by his associates in this Board. Mr. Spinney, like many of those who have been generous patrons of the University, had not received a college education, but he had a warm heart and an open hand for institutions of learning, as well as for other benevolent causes, and especially was he a strong and ardent friend of Wesleyan. A man of large affairs, and busy with many interests and responsibilities, he was ever faithful to his duties as a trustee, and gave evidence of his abiding interest in the University to the last, in the final disposition of his estate."

Announcement was made of the death of George I. Seney, in April last; whereupon the Board ordered the following minute, presented by the same Committee, to be entered in the record of its proceedings:

"Mr. Seney, in early life, was for a short time a student in Wesleyan University, and afterwards was for several years a member of this Board. He was the son of Rev. Robert Seney, one of the very few Methodist ministers of his generation who had received a collegiate education.

"After graduating at the University of the City of New York, George I. Seney decided to pursue a business, rather than a professional, career. But he always preserved his love for books and learning, and chose for his closest friends and companions men of intellectual gifts and culture. In youth he joined the Methodist Episcopal Church, and he remained a member thereof until his death. Although constantly engrossed in business cares and labor, he took an active interest in all that concerned the church of his choice, and was a liberal supporter of its various institutions. Indeed, his name became familiar throughout the country because of his large and generous contributions to churches, to charitable and literary institutions, and to schools and colleges far and near.

"While a member of this Board he spared neither time nor money in endeavoring to promote the welfare of our University, and much of the increased prosperity and usefulness which has marked its recent history we believe to be due to his magnificent gifts and wise counsels.

"He did not continue with us until the end of his life. But we cannot adjourn without making some expression of the friendship and esteem in which he was

always held by his fellow-trustees, and putting upon record our sense of the obligation the University will always be under to respect and honor his memory."

The usual formal business was transacted, a number of committees were appointed, and the Board adjourned to meet in New York City at the call of the President of the University.

ALUMNI ASSOCIATION.—The Annual Meeting of the Association was held on Tuesday of Commencement week.

Webster R. Walkley, '60, and William C. Wallace, '76, were elected representatives of the Association on the Board of Trustees.

THE FINANCES.—The following is a brief statement of the property of the College, according to the most recent appraisal, and of the income and expenditures for the last college year, 1892-93:

Invested Funds and Productive Real Estate, - -	\$1,094,723 81
College buildings and campus, - - - -	456,300 00
Scientific collections and apparatus, - - - -	82,205 00
Library, - - - - - - - -	45,000 00
Furniture in various college buildings, organ, etc., -	8,750 00
Bills receivable, - - - - - - - -	16,000 00
	\$1,702,978 81

This estimate does not include, of course, the new gymnasium, the improvements in North College, or any other increase in the value of college property since last Commencement.

Income for the year 1892-93.

Students' bills, - - - - - - - -	\$18,805 41
Interest, rents, etc., - - - - - - - -	57,746 96
Miscellaneous, - - - - - - - -	2,502 04
Balance, - - - - - - - -	621 34
Subscriptions, - - - - - - - -	2,100 00
Total, - - - - - - - -	\$82,075 75

Expenditures for the year 1892-93.

Salaries, - - - - - - - -	\$50,140 00
Women's Dormitory, - - - - - - - -	2,975 49
Fuel, gas, water, - - - - - - - -	3,471 49
Insurance, - - - - - - - -	230 00
Repairs, improvements, - - - - - - - -	7,669 58
Laboratories, Observatory, Museum, - - - -	2,272 04
Library, - - - - - - - -	828 43
Janitorial service, - - - - - - - -	3,997 87
Miscellaneous—catalogues, printing, etc., - - -	10,547 12
	\$82,132 02

DEPARTMENT NOTES.

GERMAN.—The following courses in German are given this year:

Course I. Otis's *Elementary German*, Stern's *Studien und Plaudereien*, Grimm's *Maerchen*, and other easy books are read. In this course there is systematic translation of English into German. Translation into English is practiced only to a limited extent. The exercises are so conducted that the student learns to take thought directly from the German without going through the mental process of translating.

Course II. Lessing's *Minna von Barnhelm* and Schiller's *Wilhelm Tell* are read in German, with occasional translation into English.

Later in the year there will be exercises in German composition.

For sight reading, and also for exercises in German conversation, Storme's *Easy German Reading* is used.

Course III. Lessing's *Nathan der Weise* and Goethe's *Götz von Berlichingen* are read. Toward the end of the year informal lectures in German on a few authors of the eighteenth century will be given by the instructor.

More or less attention is paid to conversation in all the courses.

ROMANCE LANGUAGES.—*VI. French.* This course is given for the first time this year. The work will be mainly based on *Le Seizième Siècle en France* by Darmstetter and Hatzfeld, but extensive courses of reading in Montaigne, Rabelais, Marot, Ronsard, Garnier, and Mairet will be assigned. A thesis to be handed in at the end of the year, and covering the courses chosen, will take the place of an examination.

The work in this course is carried on entirely in French.

ENGLISH LITERATURE.—The Seniors, this year, will study the literature of the Age of Queen Anne—Defoe, Steele, Addison, Swift, Pope, and Bolingbroke.

Two courses of study are offered to graduate students, one that of last year, on the history of Literary Criticism, the other on the poetry of Tennyson and Browning.

ENGLISH LANGUAGE.—Freshmen this year are required to take one of the two following courses:

1. Macaulay's Essays, with extracts from the authors discussed in the Essays.
2. The History of the English Language. The class work is based upon Champneys' *History of English*, with illustrations from the *Gospel of St. Luke in Anglo-Saxon*, (edited by Bright).

An advanced course in the *Anglo-Saxon Chronicle*—open to those students who have taken Course IV.—is given this year.

MATHEMATICS.—By the liberality of E. Hill, Esq., '70, the collection of mathematical models made by L. Brill, of Darmstadt, and forming a noteworthy feature of the German University Exhibit at the World's Fair in Chicago, has been purchased by the University. It is believed that this is the only complete set of these valuable and well-known models in this country. It is expected that they will be received shortly after the close of the Exposition.

GEOLOGY.—Some changes in the work of this department are necessitated by the absence of Professor Rice last year.

I. Geology is this year required of both Juniors and Seniors (except those who elect II. Geology).

II. Geology is offered as an elective study to both Seniors and Juniors without the requirement that Course I. shall have been previously taken. As the majority of this class have not taken Course I., the first fortnight of the year is occupied by a rapid résumé of the main principles of the science, Dana's *Geological Story Briefly Told* being used as the basis for this part of the work. The remainder of the year is occupied by recitations in Leconte's *Elements of Geology*, lectures on special topics by members of the class, informal discussions, and excursions. The work will be done more slowly than in previous years, as the members of the class have had less previous training than has usually been required. The class accordingly meets five times per week, instead of three times.

BIOLOGY.—A course of lectures on the History of Bacteriology is being given during the present year as an elective to Juniors and Seniors who have taken practical work in Biology. These lectures, occurring once a week, will include a comprehensive view of our knowledge of Bacteriology from the very first observations made in the seventeenth century up to the present time.

RECENT APPOINTMENT TO THE FACULTY.

ARTHUR WILSON JAMES, appointed Tutor in German, is a graduate of Wesleyan, in the class of 1888. The year subsequent to his graduation he spent in teaching in the high school at Pottsville, Pa. In 1889 he began at the University of Berlin a course of study which he continued for four years at Berlin, Freiburg, Paris, and Munich. In 1893 he returned from Europe to enter upon the duties of his new position.

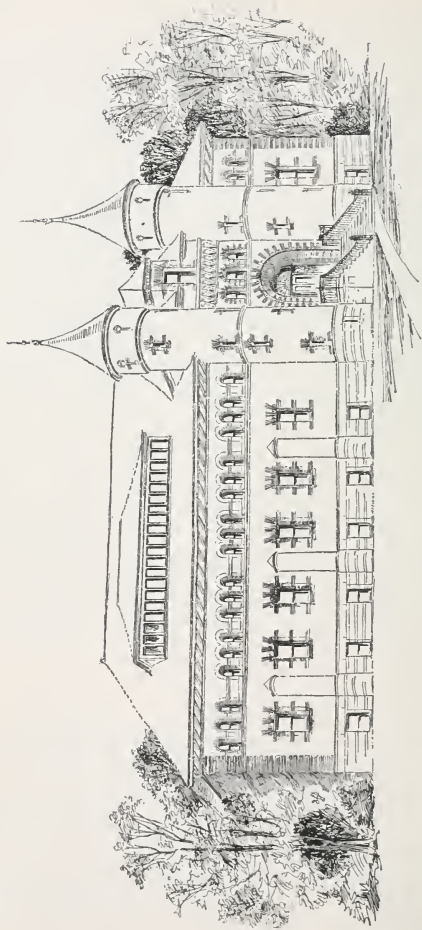
Mr. James has published *English Spoken, Uebungen in der englischen Konversation*, Berlin, 1890.

RECENT GIFTS.

Ebenezer Hill, Esq., class of '70, president of the Norwalk Iron Works, has made a gift to the University of \$750, for the purchase of the set of mathematical models to which reference is made in the Department Notes.

The sum of \$400 has been given by Mrs. P. L. Bennett, of Wilkesbarre, Pa., for the furnishing of the new rooms of the Women's Dormitory. In addition, \$65 has been given by other persons for the same purpose.

Hon. S. J. Way, D. C. L., Chief Justice of South Australia, has presented to the Library the following elegant and costly works:—"The Wealth and Progress of New South Wales," "The Picturesque Atlas of Australasia," 3 vols., 4to.



THE NEW GYMNASIUM.

Exterior Dimensions—Length, 120 feet; breadth, exclusive of towers and projections, 55 feet.

Materials—Basement story, Portland brown stone, with water table of blue stone; upper stories, brick.

Architects—Cady, Berg & See, Union Square, New York.

THE GYMNASIUM.

After many years of waiting, a gymnasium adequate to meet the requirements entailed by the growth of the college has at last become an accomplished fact. Already the foundations are laid and the walls partly raised, and by the end of the college year the building will be ready for occupancy.

The accompanying sketch indicates the general appearance of the new structure. The plans were drawn by the well-known firm of architects, Cady, Berg & See of New York, who some time ago built the Methodist church in Middletown, and more recently made plans for the building containing the steam-heating and electrical plant.

The building when finished will present a pleasing and imposing appearance. Like most of Mr. Cady's buildings, it is plain yet effective, being broken up by heavy round buttresses, projecting cornices, and massive towers. It will undoubtedly be one of the handsomest buildings on the campus.

Its dimensions are 55 by 120 feet. It is located on the north side of the rear campus and runs parallel to Wyllys avenue, with the front toward the campus.

The basement story will be of brown stone and the stories above of brick. The entrance, flanked by two massive round towers, will be approached by a broad flight of stone steps. The basement will contain three bowling alleys, a base-ball court 28 by 80 feet, baths, lockers and toilet rooms, together with a large plunge tank 80 by 16 feet.

On the first floor will be the offices of the director, and the gymnasium proper, which will occupy the whole space to the left of the entrance. This large hall with its open-timbered roof, lighted by large dormer windows, will produce a very imposing effect and will afford ample room for every variety of gymnastic apparatus. Above the main floor there will be a running track suspended from the roof, so as to leave the floor space free from pillars. On the second floor to the right will be a committee room for the use of the various athletic organizations, as well as additional bath rooms and lockers. The janitor's room will be on the third floor over the entrance. The total cost of construction will be about \$60,000.

The Building Committee is composed of President Raymond, Professor Van Vleck, Hon. D. Ward Northrop, Stephen S. Olin, and S. T. Camp. The principal college gymnasiums of the country have been visited by members of the committee. Special attention has been paid to ventilation, drainage, lighting, etc., and the present structure is believed to contain the best features of a modern gymnasium.

THE RENOVATION OF NORTH COLLEGE.

Perhaps at no time since the erection of the Chapel, Judd Hall, and the Library, has there been so much done to increase the comfort and usefulness of the college buildings as during the last summer. In addition to the new gymnasium we have to chronicle the metamorphosis of North College. Through the generosity of John E. Andrus, '63, Treasurer of the Board of Trustees, this old and hitherto gloomy structure has become a comfortable and attractive dormitory.

While the exterior remains practically unchanged, the interior has been completely remodeled. The old division into non-communicating sections has been restored, and the room hitherto forming part of the President's office has been removed to make way for an entrance hall two stories high, overlooked by a balcony on the second floor landing. The rooms and halls throughout have been finished in hard wood, the halls in maple and the rooms in ash and oak. While most of the rooms retain their original shape, some of the former hall space has been utilized to form a few suites of rooms with alcoves.

The greatest change is seen in the administrative offices, which now form a suite of commodious rooms communicating with each other. Here are found the offices of the President, his Private Secretary, the Secretary of the Faculty, and the Registrar. These rooms, together with the Reading Room on the first floor, are lighted by electricity. Room No. 23, which was occupied by Mr. Andrus during part of his college course, is now being fitted up in more elegant style than the rest of the building and will, when finished, be used as the President's office. It will be finished in black birch, and an open fire-place will be surmounted by a carved chimney piece.

When completed, these alterations will cost somewhat over \$25,000, and will be paid for by Mr. Andrus.

PROFESSOR GEORGE PRENTICE.

PROFESSOR GEORGE PRENTICE died in Pasadena, California, Oct. 10th, at the age of fifty-nine.

Professor Prentice had been in feeble health for some time past, and at the last Commencement he was given, by the Trustees, a year's leave of absence. It was hoped that this opportunity of rest with his wife and friends in the milder climate of Southern California might restore him to health. For a time there seemed to be some prospect that this hope would be realized, but his disease suddenly assumed a more serious phase, and the end came at once.

The early education of Professor Prentice was largely acquired outside the schools, though he spent two years in the Biblical Institute at Concord, N. H.—the school of theology afterwards incorporated with Boston University. After leaving there, he entered at once upon the active work of the ministry, joining the New England Conference in 1857. But his eager intellect and tireless industry enabled him to outstrip many who had enjoyed the advantages of a more

academic training, and he soon became known as one of the most scholarly and thoughtful young preachers of the Conference. He found time in the early years of his ministry to do a vast amount of reading, not only in English, but in the languages of modern Europe. In 1867 he went to Europe for study, and spent two years in the University of Halle, studying chiefly German theology and literature. While here he enjoyed particularly, not only the instruction, but the personal friendship of Professor Tholuck. On his return, he resumed his work as a minister, being stationed at Bromfield Street Church, Boston, and it was at once recognized that in breadth of culture and in strength and originality of thinking, he had few equals in the Methodist pulpit of New England. His literary tastes and wide reading brought him also into relation with students and men of letters outside his denomination: with James Russell Lowell, in particular, he formed, over the study of Dante, an intimate and life-long friendship. He was himself a forcible and finished writer, and during the years 1870-80 he contributed to the *Methodist Quarterly Review* a series of able articles on theological and literary subjects. Of these perhaps the most carefully studied were those on the relations of Theodore Parker and Ralph Waldo Emerson to New England Theology.

It was in 1871 that he accepted the call of Wesleyan University to the chair of Rhetoric and English Literature, vacated by the resignation of Professor Fales H. Newhall. Two years later a new department of Modern Languages was organized in the college and he was placed at its head. This position he held until his death, though in 1889 the department was divided and the Romance Languages assigned to another chair, leaving with him only the German language and literature—always his favorite field of study. Through most of this period he also gave instruction in Hebrew. And with all his college duties he found time for much other work. He contributed a number of articles to the *Methodist Review*; he was one of the most active members of the committee on the revision of the Methodist Episcopal Hymnal; and he published two important biographical works—the life of his intimate friend, Bishop Gilbert Haven, and the life of Wilbur Fisk, in the series of "American Religious Leaders."

As a professor, he was always rather the scholar than the pedagogue. His interest in his department never died out; in the last months of his life, when he was resting in California, he was still reading and preparing plans for a course of lectures to his classes on some phases of the work of Goethe and Schiller. He was a man of prodigious industry, sometimes remaining in his study twelve or thirteen hours out of the twenty-four. Nor was his reading confined to his department. He had a wide human interest in all such knowledge as had any moral relations, and kept himself especially well acquainted with all philosophical and religious discussion. His colleagues would probably be the first to admit that there was no man on the Faculty whose reading was so wide as his. Yet he was no recluse or book-worm. On the contrary, he was one of the most delightful of companions, and at his best when in the midst of a circle of

congenial friends. The breadth of his culture combined with a peculiarly sunny temper, and a vein of quiet humor, to make him a most admirable talker.

But those who had the privilege of knowing Professor Prentice intimately for the last ten years, will think of him first, not as the professor or the scholar, but as the man and the Christian. His was a life of rare patience and faith. Sorrows and bereavements, such as few men have to bear, fell on him, blow after blow; he was burdened by manifold anxieties; his plans were shortening, his health slowly breaking. Under the burden he lost inevitably the buoyancy of his earlier days, but he kept the same quiet cheerfulness and courtesy. No one ever heard him utter a word of complaint or of discouragement. Only those who knew him intimately could understand how sore were his trials, or how heroic was the calm Christian courage with which he bore them. The memory of his prayers in the college chapel during those years must certainly be a lasting inspiration to many who heard them.

FACTS AND FIGURES RELATING TO THE ALUMNI.

At the end of the recently published *Supplement to the Alumni Record*, a copy of which is sent together with this BULLETIN to every graduate of the college, will be found a table of statistics relating to the living graduates. In the Prefatory Note to the same publication, an announcement is made of the intention to issue more complete statistics relating to the whole body of Alumni. In the following article an attempt is made to furnish such complete statistical information.

During the years 1833 to 1893, inclusive, Wesleyan University has sent out 61 classes, with a total membership of 1,772. The smallest class was the first, comprising six graduates; the largest was the class of 1892, numbering 61. Of the total number of graduates, 1,613 received the degree of Bachelor of Arts (B. A.), 88 the degree of Bachelor of Philosophy (Ph. B.), and 71 the degree of Bachelor of Science (B. S.). The first women graduates, four in number, were in the class of 1876; the total number of women graduates to date is 49.

The degree of Master of Arts (M. A.) was conferred without examination, though with certain conditions, on graduates of three years' standing in the classes down to and including that of 1888. The number who received this degree was 1,098. Since 1891, when the awarding of the M. A. degree "in course" was discontinued, the degree of M. A. on examination has been awarded to eleven graduates, and the degree of Master of Science (M. S.), also on examination, to five graduates.

Of the total number of graduates, 452 (about 25 per cent.), are reported to be dead. The average age at death was 48. The greatest age was attained by Rev. Joseph True Arnold, '39, who died June 24, 1893, aged 86 years, 2 months. The oldest living graduate is Rev. John Wesley Merrill, '34, of Concord, N. H., who was born May 9, 1808, and is therefore over 85 years of age. Only one member of the first class is living—Daniel Henry Chase, '33, of Middletown, Conn., who is over 79 years of age.

The average age at graduation has been almost exactly 24 years. It has varied somewhat at different periods. Thus, in the first ten classes it was 23.4, in the next ten it rose to 23.7, in the third to 24.05, and in the fourth decade, comprising the classes 1863-'72, it reached its maximum, 24.5; since then the average has steadily declined, having been 24.2 in the fifth decade, and 23.85 in the last (1883-'92). The youngest graduate seems to have been Bishop Keene, of the class of 1835, who was only a little over 16 years of age when his class graduated. The oldest graduate was in the class of 1868; he was over 39 at the time of graduation. The average age at graduation from Wesleyan would probably be found on examination to be somewhat greater than that from other New England colleges. The average at Harvard during the past fifteen years is not above 22.75.

Twenty-eight per cent. (485) of all the graduates were born in New York State, fifteen per cent. (258) in Connecticut, (52 having been born in Middletown), thirteen per cent. (227) in Massachusetts, seven per cent. (125) in Maine, and five per cent. in each of the following States: Vermont, New Hampshire, New Jersey, and Pennsylvania. Thirty-three of the graduates, about two per cent., were born in England, and twenty-seven in Canada. The birthplace of six per cent. cannot be ascertained; the remainder came from twenty States not previously mentioned, and from Germany, Russia, Sweden, Africa, Newfoundland, the West Indies, and South America. New York State has held the lead in this list of birthplaces from the first, while Connecticut and Massachusetts, respectively second and third in the average for the whole sixty years, have changed positions once or twice. In the first two decades of the history of the college (1833-'52), Connecticut sent more men than Massachusetts; in the third, fourth, and fifth decades (1853-'82) the order was reversed; in the last decade (1883-'92), Connecticut resumed its original place as second to New York, while Massachusetts fell to fifth place, Pennsylvania taking the third place. The latter State sent thirty-six men during these ten years, almost ten per cent. of the whole number of graduates. In the previous fifty years of the history of the college she had sent only fifty men all told.

About seventy-one per cent. (1,230) of the graduates have been married, of whom 149 were married twice, 14 three times, and 3 four times. Their children number 1,756 boys and 1,600 girls, a total of 3,356, of whom 744 are reported dead. Nearly eleven per cent. (188) of the boys have graduated from a college, 82 from Wesleyan, and 106 elsewhere. Ten of the older graduates named a child Wilbur Fisk, after a former president of the college, and fourteen of the graduates themselves bear that name.

On page 59 of the *Supplement* will be found a table of the degrees, professional and honorary, that have been conferred on living Wesleyan Alumni since they left this college. To make a complete record, the following figures should be added, giving the degrees which have been conferred on graduates no longer living. In the class of Professional Degrees, M. D. has been conferred on 29, I.L. B. on 6, and B. D. on 3; of Honorary Degrees, D. D. (from other colleges)

on 33, D. D. (from Wesleyan) on 17, LL. D. (from other colleges) on 10, LL. D. (from Wesleyan) on 4, Ph. D. on 4, and A. M. on 1. The complete list shows that 191 of the Alumni have won professional degrees since graduation from Wesleyan, and that honorary degrees have been conferred on 229. Wesleyan has conferred the degree of D. D. on 53 of her Alumni, and the degree of LL. D. on 14.

On pages 58 and 59 of the *Supplement* a list is given of the present occupations of the living graduates. Of those who have died (452 in all) 96 (over 21 per cent.) were engaged in teaching at the time of their death, 10 being presidents of colleges, 18 professors in colleges, and 27 principals of schools. About the same number (94) were in the active work of the ministry; 72 (nearly 16 per cent.) were engaged in the practice of law, 47 had retired from active life, 38 were engaged in mercantile pursuits, 16 in farming, and 8 in manufacturing. Nearly 10 per cent. (25) were doctors.

Almost exactly 50 per cent. (883) of the graduates have been engaged in teaching at one time or another; for besides the number now engaged in that profession, namely, 238, (see *Supplement*, p. 58), and the 96 already enumerated who died while engaged in teaching, no less than 549 others have taught more or less, the most of them for a few years only after graduation. Of the total (883), 254 have been principals of schools, 113 professors in colleges or professional schools, and 48 college presidents.

About 38 per cent. (659) of all the graduates have been in the ministry, of whom 312 are now in the active work, and 94 died while so employed. The remainder have been at one time, or are still members of Conferences, and have all been stationed at least one year on a circuit. The proportion of graduates who have entered the ministry has varied considerably from time to time. In the first ten years (1833-'42), 41 per cent. were members of Conferences; in the next two decades the number rose to 42 and 49 per cent. respectively; in the fourth decade (1863-'72), the maximum of 51 per cent. was reached. Since then the number has fallen rapidly to 36 per cent. in the fifth, and 17 per cent. in the last decade. It is interesting to note that this rise and fall of the ratio corresponds exactly to the increase and decrease of the age at graduation, referred to above. This is probably more than a mere coincidence, for it will be generally admitted that the average age of the students in college at any time who purpose entering the ministry is greater than that of the remaining body of students. The class of 1860 is the ministerial class *par excellence*, 27 of its 39 members (nearly 80 per cent.) having joined Conferences. Of the 312 graduates now in the active work of the ministry, over 83 per cent. are connected with the Methodist Episcopal Church. Ten Wesleyan graduates have been elected Bishops of the Methodist Episcopal Church, of whom seven are living.

The number of those who have engaged in the practice of law at one time or another is 301, of whom 188 are still so engaged. Of this number 11 have held the office of District Attorney, and five that of State Attorney. The list includes also seventeen Judges of Probate, eight Justices of Municipal Court, eight

Rollins, Frank, '89,	-	-	-	-	-	-	<i>High School, Newton, Mass.</i>
Russell, Walter E., '93,	-	-	-	-	-	-	<i>New Britain, Conn.</i>
Talmadge, Arthur T., '93,	-	-	-	-	-	-	<i>Bridgeton, N. J.</i>
Taylor, Samuel N., '87,	-	-	-	-	-	-	<i>67 Florence Street, Worcester, Mass.</i>
Thompson, Harry A., '93,	-	-	-	-	-	-	<i>239 Fifth Ave., New York.</i>
Thorndike, Ashley H., '93,	-	-	-	-	-	-	<i>Hatfield, Mass.</i>
Westgate, Lewis G., '90,	-	-	-	-	-	-	<i>Evanston, Ill.</i>

CALENDAR.

1893.

- Sept. 28, Thursday, 9:00 A. M.,—College Year began.
 Nov. 29, Wednesday, 12:00 M.,—Thanksgiving Recess will begin.
 Dec. 3, Sunday, 8:50 A. M.,—Thanksgiving Recess will end.
 Dec. 22, Friday, 5:00 P. M.,—Christmas Recess will begin.

1894.

- Jan. 3, Wednesday, 7:50 A. M.,—Christmas Recess will end.
 Jan. 25, Thursday,—Day of Prayer for Colleges.
 Feb. 12, Monday,—Feb. 17, Saturday,—Mid-year Examinations.
 Feb. 22, Thursday,—Washington's Birthday, a holiday.
 Mar. 21, Wednesday, 5:00 P. M.,—Easter Recess will begin.
 Mar. 27, Tuesday, 7:50 A. M.,—Easter Recess will end.
 Apr. 12, Thursday,—Junior Exhibition.
 June 27, Wednesday,—COMMENCEMENT.



—THE—
Wesleyan University Bulletin.

MIDDLETOWN, CONN.

MAY, 1894.—No. 14.

IT is probable that nothing will be of so much interest during the approaching Commencement season, at least to all younger Alumni, as the completion of the new gymnasium.

At the date of this writing the electric lighting is being put in, and the last work on the building should be done by Commencement time. Whether there shall be any formal dedication of the building during Commencement week has not yet been determined, but it is hoped, at all events, that it will be completed and open for inspection. A large attendance of Alumni is confidently expected during Commencement week this year.

The year just closing has not been marked by any important changes in methods or curriculum. The most noteworthy modification of the course of study is the considerable reduction of required Physical Science in the Junior year. This throws open to the student a wider range of electives, and allows him after the beginning of his third year to consult more freely his own aptitudes and intentions in the choice of his work.

His many friends will be gratified to learn that Professor Van Vleck is now enjoying the well-earned period of rest and recuperation voted him by the Trustees at their mid-year meeting. He is at present in Italy, and will spend the summer in Europe, returning in time for the opening of the fall term.

Attention is called on a following page of the BULLETIN to the needs of the college library. Now that the long desired gymnasium is built, it seems certain that the library is the next point to which the liberality of the friends of the

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1014

College can most wisely be directed. No gift would bring greater returns of usefulness than such an endowment of our library as would put it on an equality with the best college libraries of the country.

A glance at the announcements in the Department Notes will show several interesting new courses of study for next year, and indicate that the educational facilities of the College are constantly increasing. It is believed that there will be a correspondingly steady increase in the number of students. Owing doubtless to the hard times, the class entering last fall was slightly smaller than that of the year previous, but all indications point to a large class in September.

TRUSTEE MEETING.

The adjourned annual meeting of the Board of Trustees of Wesleyan University was held in New York City, March 23, 1894, with 22 members present.

President Raymond presented a report on the state of the college.

S. F. Upham and D. H. Ela were appointed a committee to prepare a minute on the death of Prof. Prentice, to be presented at the next meeting of the Board.

Prof. Van Vleck was granted leave of absence from April 1 to October 1, or for a longer time if he desires it.

The members of the Executive Committee resident in Middletown were appointed a committee to make a reappraisal of some of the college buildings, made necessary by recent improvements.

A scheme was adopted by which absent alumni are to be enabled to nominate and to vote for candidates to represent the alumni on the Board of Trustees. The details of the scheme will be found on another page.

The Board adopted the recommendations of the President and Faculty, elsewhere referred to, concerning changes in the course of study.

The following resolution was adopted:

"Resolved, That the Trustees hereby declare their hearty appreciation of the generous gift of Mr. John E. Andrus, the Treasurer of the Board, by which the North College has been so admirably renovated, and that we return to him our most sincere thanks for this valuable improvement."

RECENT GIFTS.

Mrs. C. B. Rogers, of Meriden, has given the sum of \$100 for the purchase of furniture for the Ladies' Dormitory, and through her interest and assistance \$205 have also been contributed for the same purpose by Messrs. Walter Hubbard, Charles Parker, J. D. Billard, N. L. Bradley, O. B. Arnold, A. L. Stevens, and Mrs. I. C. Lewis, all of Meriden.

DEPARTMENT NOTES.

LATIN.—The Latin Seminary is conducted this year in Room 40, S. C., which has been conveniently fitted up for the purpose. To the inner room connected with this, the instructor in charge has transferred about a thousand of his own technical books, which are thus made available for constant use by members of the Seminary, who have also contributed a considerable sum for the purchase of books for the Seminary library.

Beginning with next year, any one of Courses II., III., and V. may be elected for either half-year by itself.

The following new courses are announced for next year:

XIII. Methods of Research. A course of practice in the investigation of simple problems in Roman history and literature, and in the preparation of papers in Latin embodying the results of the research. PROFESSOR MERRILL.

XIV. Latin Epigraphy. A course for beginners, based upon Cagnat's *Cours d'Épigraphie Latine*, Rushforth's *Latin Historical Inscriptions*, and Dessau's *Inscriptiones Latinae Selectae*, with constant reference to other works. PROFESSOR MERRILL.

XV. Book and Journal Club, for the tracing of current progress in Roman Archæology and Literature. PROFESSOR MERRILL AND MR. NICOLSON.

These courses are intended primarily for graduate students, but others who have a sufficient amount of preliminary training may be admitted to any of them on special application to the instructor.

The subject for the Latin Seminary will be announced after conference with prospective members.

The subjects for the prizes in the department for the year 1894-95 will be as follows:

For the Sherman Prize: A study in early Roman history, including Livy, Books I. and II.; Ihne's *Early Rome* (Epochs of Ancient History); Niebuhr's *History of Rome* (English translation), the chapters on Beginning and Nature of the Earliest History, Examination of the Stories of L. Tarquinius and Servius Tullius, and Commentary on the Story of the Last Tarquinius; Preface to Macaulay's *Lays of Ancient Rome*; Mommsen's *History of Rome* (English translation), Book I., cc. 4, 5, 6, and 7, and Book II., cc. 1 and 2; Lewis, *On the Credibility of Early Roman History*, cc. 1, 6, 7, 9, and 11.

For the Phi Beta Kappa Prize: 1. The first three books of the letters of Pliny the Younger, and the book of correspondence with Trajan; 2. The history of the reign of Trajan; 3. A translation into Latin of the letter of Wm. Cowper to Mrs. King, under date of Oct. 11, 1733, beginning, 'You are perfectly secure from all danger of being overwhelmed with presents from me.'

GERMAN.—I. A course in German composition based on von Jagemann's *German Prose Composition* and *German Syntax* will be given next year for the first time. In the class there will be oral translation of an easy English text into German.

2. A course in Middle High German will also be offered. Selections from the *Nibelungenlied*, Wolfram's *Parzival*, and the poems of Walther von der Vogelweide will be read.

ROMANCE LANGUAGES.—The course in Old French will be given next year; the text book will be Constans' *Chrestomathie de l'Ancien Français*.

Lectures will be given on the principles of Romance Philology, and there will be practice in the application of phonetics to the change of Latin to French.

Those who expect to elect this course next year should inform the instructor of their purpose before June 15th.

ENGLISH LITERATURE.—The Senior class in English Literature next year will study the literature of the period 1830-1870, principally in the writings of Carlyle, Ruskin, Matthew Arnold, Tennyson, and Browning.

Graduate work in English Literature next year may be to some extent adapted to the individual needs and wishes of those who elect it, but it is probable that two courses will be given; one on Elizabethan Drama, and the other on English Literary Criticism, 1789-1832, with special attention to the work of Coleridge, DeQuincey, and the early Reviewers.

ANGLO-SAXON.—The following changes will be made in the Sophomore course in Anglo-Saxon for next year:

1. The introductory text-book will be Cook's *First Book in Old English*.
2. Greater prominence will be given to sight-reading, especial use being made of the *Anglo-Saxon Chronicle*.
3. A series of weekly lectures on the history of Anglo-Saxon literature will be added to the course, so that the class will meet three times a week instead of twice, as heretofore.

This course is given only in alternate years, and is required of all who wish to take the courses in Early English.

PHILOSOPHY.—1. During the first term of the current year an elementary course was carried on in experimental psychology, for honor students. The course was conducted according to the plan of Professor Sanford given in the *American Journal of Psychology*.

In connection with this course the investigation on "The Imagery of American Students," for which the data had long been collecting, was brought to completion. The results of the inquiry will be published during the coming summer.

2. Course VII. will not be offered every year, but only when there appears to be special need or demand for it. It is intended primarily for candidates for honors in psychology and other advanced students; and those who may wish to have it given in any year should make special application to the professor in the department.

3. Course VI. will hereafter be known as the Philosophical Seminary. It will be held twice a week counting as three times, instead of three times a week as at present, the amount of work required of students not being diminished.

The course will, further, vary from year to year. Besides the Selections from Leading Modern Philosophers from Locke to Kant, as given during the current year, two additional courses are proposed, with others to be added later. These new courses are (1) The Philosophy of the XVIII. Century Illumination in France and Germany, and (2) The Philosophy of Lotze. The subject for 1894-5 will probably be the first of these.

ETHICS AND EVIDENCES OF CHRISTIANITY.—Evidences of Christianity will next year be required of all Seniors. The class will meet twice a week during the second half-year. No change will be made in Ethics.

CHEMISTRY.—*Investigations of Foods in the Chemical Laboratory.* At the request of the Columbian Commission a study of the food products of the World's Fair was undertaken during the last summer vacation by Prof. Atwater, with the aid of a number of chemists, including Mr. C. D. Woods, Dr. H. B. Gibson, Dr. C. F. Langworthy, Mr. H. M. Smith, Mr. G. H. Mitchell, Mr. A. E. Loveland, Mr. E. L. Sturtevant and Mr. F. W. Frost, who are now connected with the laboratory. Some sixteen chemists, graduates of twelve American and European colleges and universities, were engaged in the investigation in Chicago, which was carried on in the chemical laboratories of the University of Chicago and the Medical School of Northwestern University. At the close of the Fair the work was brought to Middletown for completion and is now nearly done.

The purpose was to secure definite information as to the chemical composition and nutritive values of the food products on exhibition, both home and foreign. The opportunity was also used to study the food consumption of some of the peculiar people at the Fair, such as the Javanese, Bedouin Arabs and others.

The investigation is more extensive than has previously been attempted at any time or place. Very fortunately the Executive Committee on Awards of the Columbian Commission, under whose auspices the investigation was carried on, generously favored painstaking in the methods of inquiry. A preliminary report is now being prepared for publication.

An illustration of the progress of the college is found in the number of assistants and graduate students in the chemical laboratory, which was larger during the past year than at any previous time. Eleven persons are engaged in the work of instruction and research; the majority of them so far advanced as to be ranked as professional chemists.

BIOLOGY.—The course in Botany has been materially changed during the present year by the introduction of laboratory work upon structural botany, including the microscopic study of the chief orders of cryptogams. This work has occupied something more than one-third of the time, the remainder being devoted to the study of flowering plants as in previous years.

The course in Physiology will hereafter be elective. The amount of time devoted to the study will be the same as hitherto, but the course will be made somewhat more thorough and comprehensive.

There has been organized for the present year a journal club for the discussion of bacteriological literature. The club has been composed mostly of graduate students and has held weekly meetings throughout the year.

The Summer School at Cold Spring Harbor holds its regular session from July 5th to August 31st. Several students from Wesleyan will attend. Work at the Summer School is received as work for special honors in Biology.

LECTURES AND PUBLICATIONS BY MEMBERS OF THE FACULTY.

BY PRESIDENT RAYMOND.—Address at National Congress of Epworth League at Cleveland, Ohio, June 29, 1893, on Equipment for Christian Work.

Address at Educational Congress of World's Fair, July 28, 1893, on The Moral Tone of the Colleges.

Paper at Parliament of Religions, Sept. 25, 1893, on Education in the Methodist Church.

Several addresses on Education at the Annual Conferences.

BY PROFESSOR RICE.—*Lectures*.—The Credibility of the Resurrection of Jesus, Springfield District Preachers' Meeting, Sept. 18, 1893.

Address at the funeral of Professor Prentice, Wesleyan University, Oct. 12, 1893. (Published in *Zion's Herald*, Oct. 18, 1893.)

The Skeptical and the Dogmatic Element in Religious Thought, Wellesley College, Oct. 22, 1893.

Genesis and Geology, Boston Preachers' Meeting, Jan. 29, 1894.

A Trip to Bermuda, Phillips Academy, Andover, Feb. 16, 1894.

The Principles of Natural History Classification, Yale Philosophical Club, Feb. 19, 1894.

The Red Sandstones and Traps of the Connecticut Valley, Brooklyn Institute, April 3, 1894.

Publications.—The Mutual Influence of Belief and Character. *Zion's Herald*, May 10, 1893.

Berlin. *Zion's Herald*, July 26, Aug. 2, 1893.

Review of Geikie's "Fragments of Earth Lore." *American Journal of Science*, February, 1894.

BY PROFESSOR ATWATER.—*Lectures and Addresses*.—An International Scientific Exchange, before the International Chemical Congress at the World's Fair.

The Chemistry and Food Value of Fish, before the International Fisheries Congress at the World's Fair.

The Respiration Calorimeter, before the Connecticut State Board of Agriculture at Hartford.

Food and Progress, before the Willimantic Literary Club.

Same, before the Men's Society of the Church of the Covenant in Washington.

Food and Survival, before the Brooklyn Ethical Club.

Same, before the New York Scientific Sermons Society.

Publications.—Food Waste in American Households. *Forum*, September, 1893.

A number of articles of a technical character (physiological chemistry) in Government publications.

PROFESSOR WINCHESTER has given courses of lectures on literary subjects in Wells College, in Mt. Holyoke College, in St. Paul's School, Concord, N. H., in Brooklyn, N. Y., in Willimantic, Conn., in Paterson, N. J., in Wilkesbarre, Pa.

He has given single lectures in Williams College, in Princeton College, in the Lawrenceville, N. J., Boys' School; in Concord, Mass., Norwich, Conn., and elsewhere.

He delivered an address before the N. Y. East Conference, April 9, on The Advantage of Literary Study to the Minister, and an address before the Epworth League Convention in Scranton, April 15, on Broader Conceptions of a Religious Life.

In the Athenæum Press Series, which is under the general editorial supervision of Professor Kittredge of Harvard, and Professor Winchester, the following volumes have appeared since January first:

Jeffrey.—Edited by L. E. Gates, instructor in Harvard University.

Gray.—Edited by Wm. L. Phelps, Ph. D., instructor in Yale University.

BY PROFESSOR CONN.—*Lectures.*—The History of Animals. Cold Spring Harbor, July 12; Bridgeport, Dec. 12, 1893; Brooklyn, May 8, 1894.

Drinking Water, Cold Spring Harbor, Aug. 22, 1893.

Two Extremes of Animal Life, Cold Spring Harbor, Aug. 24, 1893.

Protoplasm and the Modern Microscope, New Britain, Dec. 18, 1893.

Churns, Hartford, December 19, 1893.

The Secondary School and the College. Address at dedication of academy building at Ashburnham, Mass., January 2, 1894.

Cream Ripening by Pure Bacteria Cultures, New Britain, January 24, 1894.

Value of a College Training, Wilbraham Seminary, February 15, 1894.

Cream Ripening, Springfield, March 15, 1894.

A Biologist's View of the Doctrine of Christ. Address before New England Southern Conference in Brockton, April 5, 1894.

Publications.—The Ripening of Cream. *Bulletin No. 12 of Storrs Agricultural Experiment Station.*

The Ripening of Cream by Artificial Cultures of Bacteria. *Annual Report of Storrs Agricultural Experiment Station, 1893.*

Churns. *Annual Report of the Connecticut Board of Agriculture, 1893.*

The Loss of an Old Friend—Protoplasm. *Methodist Review*, January, 1894.

BY PROFESSOR MERRILL.—On Some Aspects of Preparatory Work in Latin. An address before the High School Section of the Connecticut State Teachers' Association, published in *The School Review*, September, 1893.

BY PROFESSOR ARMSTRONG.—Lecture on Transition Eras in Thought, College Chapel, March 29, 1894.

Publications.—A translation of Falckenberg's History of Modern Philosophy, complete with notes, bibliography and additions by the translator, especially in connection with English and American philosophy.

A German University Festival. *New York Independent*, Sept. 28, 1893.

BY PROFESSOR MEAD.—Elementary Composition and Rhetoric, 286 pp., Leach, Shewell and Sanborn: Boston, New York and Chicago.

BY ASSOCIATE PROFESSOR STEPHENSON.—*Lectures*.—The Duties of Citizenship, Aug. 12, 15, Sept. 8, 12, and 17, 1893, in various towns in Illinois; Feb. 18, March 18, 1894, in Middletown and Hartford, Conn.

Morals in Politics, Aug. 24, Sept. 18, 1893, in Saratoga and Chillicothe, Ill. Charlemagne, College Chapel, February 5, 1894.

Publication.—A Syllabus of Lectures in European History from the Fall of Rome to the Death of Napoleon. 110 pp. Middletown, Conn.

BY MR. NICOLSON.—Lecture on The Beast Fable: A Study in Comparative Literature, College Chapel, March 5, 1894.

Supplement to the *Alumni Record* of Wesleyan University, August, 1893.

BY PROFESSOR KUHNS.—Lecture on The Divine Comedy, College Chapel, February 19, 1894.

Dante Alighieri and the New Life. *Methodist Review*, May-June, 1894.

BY PROFESSOR ROSA.—Lecture before Bridgeport Scientific Association, March 6, 1894, on The Electric Light.

BY DR. GOODWIN.—Lecture on Romance-writing among the Greeks, College Chapel, March 12, 1894.

Review of Pater's "Plato and Platonism." *New World*, September, 1893.

BY ASSOCIATE PROFESSOR FISHER.—Lecture on What Socialism Is, and What It is Not, College Chapel, April 9, 1894.

BY MR. A. W. JAMES.—Lecture on Lessing, College Chapel, April 2, 1894.

JUNIOR EXHIBITION.

The annual Junior Exhibition was held in the College Chapel on the evening of Thursday, April 12, 1894. The Committee of Award consisted of Judge E. B. Birdsey, Rev. F. F. German, and Mr. A. C. Whittlesey. The first prize was awarded to Charles Otis Judkins, of Bristol, N. H., who spoke on The College Settlement—A National Safeguard; the second prize, to Andrew B. W. Gillies, of Rochester, N. Y., whose subject was The Influence of Phillips Brooks.

CHANGES IN REGULATIONS AND IN COURSE OF STUDY.

The following changes in regard to the method of appointing contestants for the debate and declamation prizes have been adopted by the Faculty for this year:

The Faculty shall appoint from the Junior Class four debaters who shall prepare themselves on some specified question, but who will be assigned by lot sides and positions in the debate forty-eight hours before the time of the debate. Further, it is the understanding that each debater be allowed to speak twice.

In regard to declamations, the Faculty shall nominate double the number of persons who are to compete in the final declamation contests. The persons so nominated shall deliver declamations before their respective classes, and the final contestants shall be chosen by vote of the classes.

At the meeting of the Board of Trustees, March 23, 1894, the following courses were made elective instead of required, as heretofore: in the Junior year, Astronomy, Geology and Physiology; in the Senior year, Constitution of the United States.

REGULATIONS FOR ELECTION OF TRUSTEES BY ALUMNI.

At the last meeting of the Board of Trustees, the following regulations in regard to the casting and recording of votes for trustees by absent alumni were adopted:

All graduates of the first degree of three or more years' standing, and all persons who have been admitted to a degree higher than first, whether honorary or in course, shall be entitled to vote in the election of Trustees. Only those persons thus entitled to vote shall be eligible to election by the alumni as Trustees.

On or before the first day of April of each year, the Librarian of the University shall forward by mail to each of the alumni who are entitled, in accordance with the above regulation, to vote in the election of Trustees, a notice of the names of the two Trustees elected by the alumni, whose term of office will expire in the following year; and shall, in the same communication, invite the alumnus to return a written ballot containing the names of not more than four persons as candidates for the two Trusteeships which are to be filled. The notice shall further specify that this ballot for nomination of candidates will close on the 20th day of May. The ballots received on or before the said 20th day of May shall be canvassed by a board consisting of the Librarian of the University and two other persons who shall be appointed by the Executive Committee of the Alumni Association. Any ballot containing more than four names shall be rejected by the board of canvassers.

On or before the 30th day of May, the Librarian of the University shall forward by mail to each alumnus entitled to vote, a second circular giving the names of the six persons who have received the highest numbers of votes in the

ballot for nomination. If, however, two or more candidates next below the first five on the list shall have the same number of votes, they shall all be included in the list of nominees; and the procedure shall be the same in any analogous case. In this second circular each alumnus entitled to vote shall be invited to send a written ballot for two persons for the two Trusteeships which will become vacant; but no persons can be voted for whose names are not included in the list of six or more nominees. In the count of the votes a ballot containing more than two names shall be rejected. Each ballot forwarded by mail, as above provided, whether in the preliminary vote for nomination or in the final vote for election, shall be signed by the voter, and any ballot lacking signature shall be rejected.

On Tuesday of Commencement week the polls shall be open for alumni, who may be personally present, to give their ballots for the election of Trustees, from 9 A. M. to 11 A. M. In the case of voters who are personally present, as in the case of those who forwarded their ballots by mail, no candidates shall be voted for who are not included in the list of nominees announced by the Librarian in his second circular. The vote shall be under the direction of a board of canvassers, consisting of the Librarian of the University and not less than two other persons who shall be appointed by the Executive Committee of the Alumni Association. The board of canvassers shall be provided with a list of the alumni, and shall check thereon the name of each alumnus who shall present his vote in person. The ballots which have been received by mail shall be counted by the same canvassing board. The counting of ballots, whether presented by the voters in person or received by mail, may begin at 9 A. M. on the Tuesday of Commencement week; and at 11 A. M. on that day the polls shall be closed as regards both ballots presented in person and ballots forwarded by mail. If an alumnus who has forwarded a ballot by mail shall desire to do so, he may appear in person and present another ballot to the board of canvassers; in which case his previous ballot shall be rejected. The state of the vote shall be kept secret by the board of canvassers until the counting is completed. The two candidates receiving the highest numbers of votes shall be declared elected. If two or more candidates next below the highest on the list shall have the same number of votes, one of the two selected by lot shall be declared elected; and if the three or more candidates having the highest number of votes shall have the same number, two of those candidates selected by lot shall be declared elected.

The board of canvassers shall report the result of the election to the Secretary of the Alumni Association (by whom it shall be entered in the records of the Association), and to the Secretary of the Board of Trustees.

In case of a vacancy occurring by death or resignation or otherwise, before the expiration of the term of a Trustee elected by the alumni, the procedure shall be analogous to that above prescribed. In the case of such vacancy, accordingly, each voter shall be invited to nominate not more than two candidates; the three candidates receiving the highest numbers of votes shall be declared nominees; each voter shall be invited to give his vote for one of the said three nominees;

and the one receiving the highest number of votes shall be declared elected to fill such vacancy.

The Librarian shall keep a list of the alumni and their addresses so far as known to him, and shall from time to time enter therein the address of any alumnus who shall report the same to him; and notices mailed to the alumni in accordance with this list shall be deemed to be properly mailed.

THE YOUNG MEN'S CHRISTIAN ASSOCIATION.

The annual meeting and reception of the College Young Men's Christian Association was held in the Chapel on Wednesday evening, May 9th. Bishop E. G. Andrews was the guest of the Association and made the principal address of the evening.

The following statements as to the work of the Association for the year are taken from the report of its President, Mr. F. W. Frost:

The work of the Association has suffered somewhat because of the financial distress of the year. It was found impossible to provide for an extended course of lectures such as were given last year, and it was also deemed unwise to push the matter of a Y. M. C. A. building. The building subscription therefore remains practically the same as a year ago—\$9,370, of which the undergraduates have pledged about \$7,500. It is hoped that during the coming summer such work may be done as shall ensure a large increase of this subscription.

Of the incoming class eighty-seven per cent. became members of the Association; the total membership is now about ninety-two per cent. of all the men in college. This is a membership fifty-three per cent. larger than the average membership in New England College Associations.

The religious meetings have been well sustained throughout the year. Special half-hour services were held during the week of prayer and previous to the day of prayer for colleges.

Much interest has been manifested in missions during the year. Mr. Sherwood Eddy, of the Student Volunteer Movement, and Rev. F. M. North, of the New York City Missionary Society, have given addresses. Two delegates were sent to the Detroit Student Volunteer Convention. Efforts are being made to send men to the New York City mission work as during previous summers. Financial aid in this matter is earnestly solicited from the alumni.

MIDDLETOWN SCIENTIFIC ASSOCIATION.

The following papers have been read at the meetings of the Middletown Scientific Association since the last report in the BULLETIN:

May 23.—The Great Telescopes of the World, by J. M. Van Vleck.

June 13.—The Bomb-Calorimeter, by C. D. Woods. The Respiration-Calorimeter, by W. O. Atwater.

October 10.—The Relation of Modern Microscopic Study to the Theories of the Origin of Life, by H. W. Conn.

November 14.—Electricity at the World's Fair, by E. B. Rosa.

December 19.—The Changes of Value of Gold and Silver, by W. C. Fisher. Wild Cats of North America, by S. W. Loper. Discovery of the Antennæ of Trilobites, by W. N. Rice.

January 9.—Investigations of Food at the World's Fair, by W. O. Atwater, C. D. Woods, H. B. Gibson, C. F. Langworthy, G. H. Mitchell, H. M. Smith.

February 13.—The Electric Fountain, by E. R. Knowles.

March 13.—The Geology of the Connecticut Valley, by W. N. Rice.

April 10.—A New Method of Protection from Lightning, by N. D. C. Hodges. Mythical Animals, by L. O. Kuhns.

RECENT COLLEGE APPOINTMENTS.

- Class of 1880. Abram Winegardner Harris, President of Maine State College.
- Class of 1884. Edward Burr Van Vleck, Instructor in Mathematics, University of Wisconsin.
- Class of 1886. Henry Fitch Clark, Professor of Latin, University of Southern California.
- Class of 1887. Buel Owen Campbell, President of American College, Concepcion, Chili.
- Class of 1888. Arthur Wilson James, Tutor in German, Wesleyan University.
- Class of 1889. Arthur Herbert Meritt, Professor of Latin and German, Trinity College, N. C.
- Class of 1890. Stockton Axson, Professor of English Literature, *pro tempore*, University of Vermont.
- Class of 1890. John Andrew Bergström, Assistant in Psychology, Clark University.
- Class of 1890. Frank Burnett Dains, Assistant in Chemistry, University of Kansas.
- Class of 1891. Isabel Evangeline Graves, Instructor in English Literature, Wellesley College.
- Class of 1892. Lincoln Robinson Gibbs, Instructor in English, Rutgers College. [Resigned on account of ill health.]
- Class of 1892. Olin Freeman Tower, Assistant in Chemistry, Wesleyan University.
- Class of 1893. Frederic Cutts, Assistant in Physics, Wesleyan University.
- Class of 1893. Charles Gourlay Goodrich, Assistant Librarian, Wesleyan University.
- Class of 1893. Mattie Lincoln Hills, Instructor in English, Mt. Holyoke College, S. Hadley, Mass.

- Class of 1893. Albert Emory Loveland, Assistant in Biology, Wesleyan University.
- Class of 1893. Vida Frank Moore, Instructor in Philosophy and Political Economy, Mt. Holyoke College, S. Hadley, Mass.
- Class of 1893. Frederick Curry Ostrander, Assistant Secretary of the Faculty, Wesleyan University.

THE LIBRARY.

There is a growing feeling among those who have attempted to use the College Library in making investigations in any of the departments of college work that there is urgent need of large accessions of new books. So long as the work of the College consisted almost entirely of recitations from text-books, there was little call for a library of wide range. Indeed, for the purposes of the general student who is aiming at a merely general culture, the College Library, with its forty thousand volumes, is a very respectable collection of standard works. But the progress of the last few years and the changes in methods of instruction have made necessary a corresponding increase in the facilities to be placed at the disposal of faculty and students. Nothing is more disheartening to an earnest student than to enter upon investigations which have to be suddenly broken off because of the lack of books. The defects of the Library are most keenly felt in the departments of literature, language, philosophy, economics, and history, which are entirely dependent upon books. Some of these departments have been founded less than five years, and have never been fully equipped with the literature necessary for investigation. If this is true of the department of the so-called humanities, it is hardly less true that the scientific departments are sadly hampered by the scanty supply of recent scientific works. Much more might be urged, but enough has been suggested to indicate that the most pressing need of the College at present is an immediate increase of the library fund.

To supply the every-day needs of the college work an effort is on foot to raise five thousand dollars to be applied to the immediate purchase of books. Several hundred dollars have already been pledged; and an organization is being perfected by the students, to bring the matter more prominently before alumni and other friends of the College. It must not be imagined, however, that any small sum will supply the permanent needs of the Library. Nothing short of a permanent library fund of a hundred thousand dollars will approximate to what is imperatively needed. If a high standard of scholarship is to be maintained and modern methods of instruction are to be adopted, there must be modern materials to work with. If, on the other hand, there is not a steady increase in the library equipment, the policy of expansion must be seriously modified, and only that work can be undertaken which the facilities afforded by the Library make possible.

It is the intention of the Librarian to secure for the Library sets of the official publications of the states and territories, particularly of the reports made by state commissioners, such as reports on agriculture, charities, education, geology, labor statistics, health, etc. Graduates and friends of the University who may be willing to give such publications to the Library are requested to communicate with the Librarian, W. J. James.

During the present year sixty reports on labor statistics have been obtained through the kindness of Alumni and commissioners of labor. Reports on labor statistics needed to complete sets are as follows:

California, 2, 3; Colorado, 1, 3; Illinois, 1, 6; Indiana, 1-3 (annual); Iowa, 1-4; Kansas, 1-4; Maryland, 1 (biennial); Massachusetts, 1, 8, 9, 11, 12, 17; Minnesota, 1; Missouri, 1-5, 7-11, 13, 14; Nebraska, 1; New Jersey, 1, 2, 4-7; New York, 1-3, 5; Ohio, 1-12; Pennsylvania, 1-15; Rhode Island, 1, 2.

OBITUARY RECORD.

The following deaths among the Alumni have been reported since the publication of the last OBITUARY RECORD:—

CLASS.

- 1835. Elijah Keeler Bangs, b. 12 July, 1817, in New York, N. Y.; d. 19 February, 1894, in New York, N. Y.
- 1837. Smith Clift, b. 1815, in Carmel, N. Y.; d. 16 August, 1893, in Newport, R. I.
- 1837. Lewis Dwight, b. 22 July, 1813, in Thompson, Conn.; d. 24 December, 1891, in St. Louis, Mo.
- 1838. Jesse Beaufort Hurlburt, b. 1820, in Prescott, Ont.; d. 1891, in Ottawa, Ont.
- 1838. Timothy Danielson Lincoln, b. 11 May, 1815, in Brimfield, Mass.; d. 1 April, 1891, in Cincinnati, Ohio.
- 1839. Joseph True Arnold, b. 20 April, 1807, in Derby, Vt.; d. 24 June, 1893, in St. Peter, Minn.
- 1840. David Plumb, b. August, 1810, in Stratford, Conn.; d. 1889.
- 1841. Robert Allyn, b. 25 January, 1817, in Ledyard, Conn.; d. 7 January, 1894, in Carbondale, Ill.
- 1845. Jarvis Nichols Husted, b. 27 July, 1823, in N. Greenwich, Conn.; d. 13 April, 1893, in New York, N. Y.
- 1845. William Ross Johnson, b. 11 January, 1826, in Troy, N. Y.; d. 16 April, 1890, in Utica, N. Y.
- 1846. Henry Baylies, b. 9 September, 1822, in Edgartown, Mass.; d. 13 December, 1893, in Malden, Mass.
- 1846. Perry G. Childs, b. 4 December, 1826, in Cazenovia, N. Y.; d. 16 July, 1893, in Oakland, Cal.

1846. David Alexander Scott, b. 25 August, 1825, in Montgomery, N. Y.; d. 27 August, 1890.
1848. Robert McGonegal, b. 25 March, 1822, in Tompkins Co., N. Y.; d. 4 December, 1892, in Norwalk, Conn.
1849. James Calder, b. 16 February, 1826, in Harrisburg, Pa.; d. 22 November, 1893, in Harrisburg, Pa.
1849. Charles Rollin Dean, b. 25 June, 1827, in Lanesboro, Mass.; d. 28 March, 1894, in New York, N. Y.
1849. George Gardner Jones, b. 9 October, 1822, in Sterling, Mass.; d. 9 May, 1891, in Brighton, Mass.
1850. William Lawrence, d. 28 April, 1890, in Avon-by-the-Sea, N. J.
1851. Andrew McKeown, b. 30 July, 1823, in Nictaux, N. S.; d. 11 December, 1893, in Watertown, Mass.
1852. James Ely McIntire, d. October, 1893, in Springfield, Mass.
1853. Jasper Fish, b. 23 March, 1826, in Woodstock, Vt.; d. 19 August, 1891, in Kearney, Neb.
1855. Robert Sanford Moran, d. 4 April, 1892.
1861. Nathaniel Lindsay Briggs, b. 1 April, 1841, in New York, N. Y.; d. 26 March, 1893, in Brooklyn, N. Y.
1863. Charles Thurston Johnson, b. 16 October, 1838, in Nahant, Mass.; d. 26 October, 1893, in Winthrop, Mass.
1869. Jonathan Edwards Richards, b. 14 November, 1845, in Steuben, N. Y.; d. 1 October, 1893, in Mt. Clemens, Mich.
1875. Alfred Edgar Best, b. 12 December, 1848, in Mechanicsville, N. Y.; d. 27 November, 1893, in Utica, N. Y.
1887. Edward Evans Pixley, b. 1860; d. 22 May, 1893, in Vivi, Congo, Africa.
1891. Marie Mehetabel Strobridge, b. 1869, in Evanston, Ill.; d. 20 April, 1894, in Rome, Italy.

CALENDAR.

1894.

- June 7, Thursday, 7:30 P. M.,—Junior Prize Debate.
- June 22, Friday, 7:30 P.M.,—Freshman, Sophomore, and Junior Prize Declamation.
- June 24, Sunday, 10:30 A. M.,—Baccalaureate Sermon, Rev. Bradford Paul Raymond, D. D., LL. D.
- June 24, Sunday, 7:30 P. M.,—University Sermon, Rev. Bishop Randolph S. Foster, LL. D.
- June 25, Monday, 11:00 A. M.,—Public Awarding of Prizes.
- June 25, Monday, 2:00 P. M.,—Class Day Exercises.
- June 25, Monday, 8:00 P. M.,—Glee Club Concert.
- June 26, Tuesday, 9:00 A. M.,—Annual Meeting of Board of Trustees.
- June 26, Tuesday, 9:00 A. M.,—Meeting of the Φ. B. K. Fraternity.
- June 26, Tuesday, 10:00 A. M.,—Business Meeting of the Alumni Association.
- June 26, Tuesday, —Reunions of Classes of 1844, '69, '79, '84, '87, '91.
- June 26, Tuesday, afternoon, —Receptions by the College Fraternities.
- June 27, Wednesday, 10:00 A. M.,—COMMENCEMENT.
- June 27, Wednesday, afternoon, —Commencement Dinner.
- June 27, Wednesday, evening, —Reception by the President.
- June 28, Thursday, 9:00 A. M.,—Examination of candidates for admission.
- Sept. 26, Wednesday, 9:00 A. M.,—Examination of candidates for admission.
- Sept. 27, Thursday, 9:00 A. M.,—First Term begins.
- June 26, Tuesday, 8:00 P. M.,—Address before the Phi Beta Kappa Society by Hon. Chauncey M. Depew, LL. D.

NOTE.—This engagement was made too late to be printed in its regular place.

— THE —
Wesleyan University Bulletin.
MIDDLETOWN, CONN.

NOVEMBER, 1894.—No. 15.

THE Freshman Class this year numbers ninety-four. This is the largest class in the history of the College. The whole number of students now in College is two hundred and eighty-seven; this is an increase of fourteen over the largest number hitherto registered. The gain is especially gratifying in a year when, from the financial straitness of the times, a smaller class might perhaps have been expected. It is believed that it may be taken as a promise of the regular and quiet growth of the College. The steady advance in the number of students during the past few years may be seen from the following figures: The number of students in the Catalogue in 1888-89 was 218; in 1889-90, 230; in 1890-91, 250; in 1891-92, 266; in 1892-93, 271; in 1893-94, 273; in 1894-95, 287.

It is perhaps worth noting that nearly all students now take the full course of study. In recent years students have been advised not to enter upon special or partial courses; and at present of the whole number of undergraduates there are only two not on a four-years' course.

THE new Fayerweather Gymnasium is at last completed and opened for daily use by the students. The building amply fulfills all expectations. Architecturally it is perhaps the most satisfactory structure on the campus; and in its interior arrangement and equipment it compares favorably with the best and most modern buildings of the kind in the country. Mr. Aldrich, formerly assistant superintendent of Physical Culture in Brown University, has been secured as Director and Instructor in Physical Training.

Now that the Gymnasium is finished, there can be no question that the most urgent need of the College, at the present moment, is an enlargement of its library fund. The library has been kept waiting for years while other interests have been attended to. Nothing less than an increase of the permanent library

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fund to at least One Hundred Thousand Dollars can satisfy the growing requirements of the college work in all departments. It is gratifying to know that, at the last Commencement, the attention both of the Trustees and of the Alumni was drawn to this need, and it is hoped that the well-proved liberality of the friends of the College will not long leave it unsupplied. Meantime, smaller gifts for the purchase of books will be of great service in meeting immediate wants, and increasing the efficiency of instruction in all departments.

ONE of the pleasing incidents of the early college year is the visit of the Board of Bishops of the Methodist Episcopal Church, who at the present writing are holding their semi-annual meeting (Oct. 24-31) in Middletown, at the invitation of the College. More than a third of their number—Bishops Andrews, Warren, Foss, Ninde, Mallalieu and Goodsell—are alumni of Wesleyan; and it seems especially appropriate that the full Board should meet with the oldest of the colleges under the patronage of the church they represent.

THE especial attention of teachers and students in preparatory schools is called to the announcement on another page of a change in the requirements in English for admission to college. It now seems probable that within a short time requirements for admission in this important department will be uniform throughout all the principal colleges of the country.

NOTES OF THE LAST COMMENCEMENT.

TRUSTEE MEETING.—The Annual Meeting of the Board of Trustees was held in Middletown, June 26, 1894, with thirty-one members present.

Announcement was made of the election by the New Hampshire Conference of Rev. Daniel C. Knowles, D. D., '58, as a trustee, his term to expire in 1899; and of the re-election by the Alumni of Stephen H. Olin, '66, and Hon. Watson C. Squire, '59, as trustees, whose terms will expire in 1900.

The following were elected trustees to fill vacancies on the Board: Mr. Frank S. Jones of Brooklyn, N. Y., to serve until 1897; and Rev. Samuel F. Upham, D. D., '56, Rev. William Rice, D. D., Bishop Cyrus D. Foss, D. D., '54, Mr. Charles Scott of Philadelphia, Bishop Edward G. Andrews, D. D., '47, Rev. Joseph E. King, D. D., '47, and Rev. William V. Kelley, D. D., '65, all of whose terms will expire in 1900.

The following appointments were made on the Board of Instruction: Alfred Pearce Dennis, Ph. D., to be Associate Professor of History for two years; Frank Walter Nicolson, A. M., Tutor in Latin, to be Instructor in Latin for one year; William Snyder Eichelberger, Ph. D., Tutor in Mathematics, to be

Instructor in Mathematics for one year; Charles Jaques Goodwin, Ph. D., to be Tutor in Greek a third year; Arthur Wilson James, B. A., to be Tutor in German a second year; Samuel Ward Loper, M. A., to be Curator of the Museum for one year; Charles Ford Langworthy, Ph. D., to be Instructor in Chemistry for one year; Edward Robert Sturtevant, B. S., to be Assistant in Chemistry for one year; Rupert Henry Hopkins, B. S., to be Assistant in Physics for one year; Willie Merrill Esten, B. S., to be Assistant in Biology for one year; Robert Elmer Hendershot, B. S., to be Assistant Librarian for one year; Frederic Lawrence Knowles, B. A., to be Assistant Secretary of the Faculty for one year; Olin Safford Blakeslee, to be Mechanician a fourth year. [Since the meeting of the Board, William James Shaw, M. A., has been appointed Assistant in Philosophy for one year; and C. S. Aldrich, A. B., has been appointed Director of the Gymnasium, and Instructor in Physical Training.]

Votes of thanks were passed to Mrs. J. N. Husted and B. A. Rich, '78, for gifts of books to the Library, and to Mrs. P. L. Bennett, of Wilkes Barre, Pa., Mrs. C. B. Rogers, of Meriden, Conn., and others, for contributions for the furnishing of the Ladies' Dormitory.

The President of the University was authorized to confer the degree of Master of Arts, *ad eundem*, on the following members of the Faculty: Rev. Bradford P. Raymond, D. D., LL. D., James C. Van Benschoten, LL. D., Herbert W. Conn., Ph. D., Rev. A. C. Armstrong, Jr., M. A., Walter P. Bradley, Ph. D.

The President was further authorized to confer the following honorary degrees: The degree of Master of Arts upon Elbert W. Griffith, of Norwich, N. Y., and Arthur Shimmis Kneil, of Westfield, Mass.; the degree of Doctor of Divinity upon Rev. Frank Mason North, M. A., '72, of New York, N. Y., Prof. Robert W. Rogers, Ph. D., of Drew Theological Seminary, and Rev. Elias Benjamin Sanford, M. A., '65, of Westbrook, Conn.; and the degree of Doctor of Laws upon Stephen Henry Olin, M. A., '66, of New York, N. Y., and Hon. Carroll Davidson Wright, M. A., United States Commissioner of Labor.

Prof. M. B. Crawford was granted leave of absence for the year 1895-6.

After hearing the reports of the President of the University and of several committees, the Board adjourned, to meet in New York City at the call of the President of the University or the President of the Board.

ALUMNI ASSOCIATION.—The annual meeting of the Association was held on Tuesday of Commencement week. The members of the Board of Trustees entered during the session, and a joint meeting of Alumni and Trustees was held, in the course of which speeches were made by Dr. Raymond and others on the present state and future prospects of the College. The meeting was most enthusiastic. It is proposed to make the joint session of Alumni and Trustees a feature of Commencement week hereafter.

Special mention was made of the needs of the Library. Dr. James M. Buckley made an offer of \$100 towards a sum of \$2,500, to be used in the

immediate purchase of books. Hon. George G. Reynolds, '41, President of the Board of Trustees, made a similar pledge. A committee of five was appointed, with the Librarian as Chairman, to raise the balance of the sum.

Another committee of three was appointed to raise the amount necessary for the purchase of the library of the late Professor Prentice, for the use of the College.

Stephen H. Olin, M. A., '66, and Hon. Watson C. Squire, '59, were reelected representatives of the Association on the Board of Trustees, for five years, beginning in 1895.

THE FINANCES.—The following is an abstract of the financial exhibit presented by the Treasurer at the last annual meeting of the Trustees:—

PROPERTY OF THE UNIVERSITY.

Invested funds and productive real estate, - - -	\$1,067,575 00
College buildings and campus, - - - - -	512,300 00
Unproductive real estate, - - - - -	38,500 00
Scientific collections and apparatus, - - - - -	83,755 00
Library, - - - - -	45,000 00
Furniture in various College buildings, - - - - -	6,880 00
Bills receivable, - - - - -	16,000 00
Cash, - - - - -	3,698 81
Total, - - - - -	\$1,773,708 81

This estimate includes the Gymnasium in an unfinished state.

INCOME FROM JUNE 20, 1893, TO MAY 31, 1894.

Students' bills, - - - - -	\$17,355 77
Interest on investments, and rents, - - - - -	50,177 05
Miscellaneous receipts, - - - - -	393 33
Alumni Library income, - - - - -	1,067 85
Special subscriptions, - - - - -	1,520 00
Total, - - - - -	\$70,514 00

EXPENDITURES FROM JUNE 20, 1893, TO MAY 31, 1894.

Salaries, - - - - -	\$40,230 00
Fuel, gas, water, - - - - -	3,520 42
Insurance, - - - - -	2,108 84
Repairs and improvements, - - - - -	3,438 91
Women's Dormitory, - - - - -	4,046 92
Laboratories, Observatory, and Museum, - - - - -	994 87
Library, - - - - -	913 34
Janitorial service, - - - - -	3,109 20
Miscellaneous expenditures—Catalogue, Bulletin, postage, travelling expenses, etc., - - - - -	7,465 70
Balance due Treasury, June 20, 1893, - - - - -	56 27
Total, - - - - -	\$65,884 47

THE GYMNASIUM.

The gymnasium dedication, to which the friends of the college have looked forward for so long, took place Friday afternoon, October 12. The Fayerweather Gymnasium, although not yet completed in every detail, was then near enough to completion to be available for use, and was accordingly turned over to the college. The public exercises were held on the main floor of the gymnasium, and began at half-past two o'clock with an address by President E. Benjamin Andrews, LL. D., of Brown University. The speaker gave his highest approval to the physical, mental, and moral results of gymnasium exercise. From his own experience in a college of similar grade, and with a gymnasium of similar construction and equipments, he felt confident that the new building would be a source of great good to Wesleyan.

Stephen H. Olin, LL. D., of the class of '66, and the representative of the building committee, then in a brief but graceful address formally presented the building to Hon. Geo. G. Reynolds, LL. D., of the class of '41, who received it for the Board of Trustees. The College Glee Club had added to the pleasure of the afternoon by several songs, and in conclusion of the exercises led the audience in singing "America."

The building thus turned over to active service is fully adequate to the needs of the college; and, in convenience of arrangement and completeness of equipment, will endure comparison with any American college gymnasium of the same size. It is placed in charge of a competent director, and has already become a popular centre with the undergraduates.

RECENT GIFTS.

Rev. Albert S. Hunt, D. D., '51, Secretary of the American Bible Society, has given to the Library of the University \$500, to be expended in the purchase of books for the department of Mathematics and Astronomy.

In the interest of the Women's Dormitory the following gifts have been received: From Mrs. C. B. Rogers, of Meriden, \$100 for the purchase of furniture; from Mrs. P. L. Bennett, of Wilkes Barre, Pa., \$100, and from another lady, \$25. for the purchase of books of reference and periodicals.

RECENT ADDITIONS TO THE FACULTY.

ALFRED PEARCE DENNIS, elected Associate Professor of History, was graduated at Princeton with the degree of A. B., in 1891, and received from the same institution the degree of A. M. in 1893, and of Ph. D. in 1894. He was Fellow in History at Princeton in 1891-92, and Fellow in Social Science, 1892-93. For two years (1892-94) he was Instructor in History at Princeton College, and for three years (1891-94) Lecturer in History at Evelyn College.

Professor Dennis has published "The Puritan and the Catholic Settler in Maryland," an address delivered on invitation of the Maryland Legislature, on

the occasion of the bi-centennial anniversary of the removal of the State Capitol, and printed April, 1894, by order of the Legislature of Maryland. He has also published in the Princeton College Bulletin, 1893-94, articles on "Equality" and "The Influence of Rousseau upon American Politics."

WILLIAM JAMES SHAW, elected Assistant in Philosophy, was graduated from Toronto University with the degree of A. B. in 1892, and, after holding for the following year the Fellowship in Philosophy in the same University, received the degree of A. M. The year 1893-94 he spent at Princeton in graduate work in Philosophy under Professor J. M. Baldwin.

DEPARTMENT NOTES.

GERMAN.—Two courses are given this year for the first time, one in German composition, and one in Middle High German.

Mr. James, of the department of German, received the degree of Doctor of Philosophy during the summer, at the University of Munich, Germany. His thesis was on *Die starken Praeterita in den Werken von Hans Sachs*.

ENGLISH LITERATURE.—A course of lectures on The Principal English Poets of the Period 1789-1832 will be given by Professor Winchester, in the Chapel, during the first and second terms. The collateral reading of both the Senior and Junior classes, for the present year, is directed chiefly to this period; and these lectures are intended primarily to illustrate this reading. They will be freely open, however, to all who may care to attend them. They will be given—except the first—on Saturday evenings at 7:30. The list of subjects and dates is as follows:—1. Introductory—Characteristics of the Period, Tuesday, Oct. 30th. 2. Burns, Nov. 17th. 3. Wordsworth, Dec. 8th. 4. Southey and Coleridge, Jan. 12th. 5. Scott, Jan. 26th. 6. Byron, Feb. 9th. 7. Shelley—the Man, March 2d. 8. Shelley—the Poet, March 9th. 9. Keats, March 23d.

ENGLISH LANGUAGE.—A course of weekly lectures on the history of Anglo-Saxon literature has been added to the advanced course in Anglo-Saxon. These lectures aim also to give a general view of the development of literature in Western Europe during the Anglo-Saxon period.

HISTORY.—The former course in European History is amplified this term by a series of introductory lectures upon the Archaic Civilizations of the East, and the Institutions of Greece and Rome. Fisher's "Outlines" is prescribed as the best general reference book.

A new course of two hours per week, running through the year, is offered in The History of England and France.

A course of four hours per week for the second half-year is offered in Constitutional History. In scope this elective will include a study of the origin and theory of the State; a review of the political speculations of the mediæval mind; a survey of the genesis and development of English Constitutional principles; an analysis of the fabric of the American Constitution.

Courses in Comparative Politics (Seminary), and in the Political and Economic History of the United States will be given next year.

PHILOSOPHY.—The enlargement of the teaching force in the department (see page 6) has led to the following re-arrangement of the courses of instruction for 1894-95:—

1. The Sophomore class in Logic will meet regularly in two divisions. The course will be conducted by Mr. Shaw.

2. A new course in Advanced Logic, elective for Juniors, is given by Mr. Shaw. It is devoted chiefly to a consideration of inductive logic, especially in its applications to discovery and scientific reasoning. The main part of the course is introduced by brief discussions of the history of logic, and the general principles of deduction, and if time permits the course may conclude with some account of the history of science.

3. Mr. Shaw offers further a new elective course for Juniors in Physiological Psychology. This course will include recitations from the text-book (Ladd's Outlines of Physiological Psychology), lectures, discussions, and simple demonstrations and experiments. Some of the more elementary apparatus is to be supplied from an appropriation made for the purpose; other instruments and illustrative material have been kindly loaned to the department from the Physical and Biological laboratories.

4. Professor Armstrong offers again, at the request of several students, the course in Advanced Psychology, known last year as Course VII. It becomes this year one of the regular courses in the department, and is open to Seniors and a few advanced Juniors. The conditions of admission, however, remain the same as before (see Catalogue, page 44), and it is probable that the course will not be given every year, but only when there is special need or demand for it.

5. The subject chosen for the work of the Philosophical Seminary is the Philosophy of the Eighteenth Century Illumination in France and Germany. The books needed for the course will be supplied from the special appropriation given this year to the department.

MATHEMATICS AND ASTRONOMY.—In use of the gift by Rev. Dr. A. S. Hunt, mentioned on another page, the following books among others were purchased by Professor Van Vleck during his recent absence in Europe:—

Memoirs of the Royal Astronomical Society, Vols. XVII.-L.

Monthly Notices of the Royal Astronomical Society, Vols. I.-XIV.

Liouville's *Journal de Mathématique*, second and third series.

By this purchase the University comes into possession of complete copies of these important periodicals.

The collection of Models of Mathematical Surfaces, whose purchase was recorded in No. 13 of the BULLETIN, has been received, and is now arranged in a series of cases in one of the rooms of Observatory Hall.

CHEMISTRY.—The course formerly known as Organic and Physiological Chemistry is this year divided, and will be represented in the College Catalogue as Courses V. and VI. The former occupies two hours a week for the year, the latter two hours a week during the second half-year. Course V. is elective as heretofore for those who have completed the course in Qualitative Analysis; Course VI. for those who take or have taken the elective course in Advanced Elementary Chemistry, although it is desirable that students shall also be pursuing Course V.

The laboratory course in Organic Chemistry has hitherto been devoted mainly to the preparation of typical compounds of carbon, with the special object of supplementing and illustrating the class-room course in the same branch of Chemistry (Course V., as above). It is this year so modified that the second and third terms will be spent upon such exercises as will train the student in the more common methods of organic research.

The meetings of the Chemical Club, which was organized last year, are devoted in part to papers on special topics, including the investigations in the laboratory, and in part to abstracts of articles in chemical journals. This latter feature gives to the organization much of the character of a journal club.

The chemical seminary will be devoted this year, as last, to physiological chemistry, and the investigations in this subject in the laboratory will be, as heretofore, one of the themes of study. Besides the lectures of Professor Atwater, papers are read by the members of the seminary. Graduate students and assistants, and some undergraduates also take part.

Special Honors.—Candidates for special honors in chemistry will hereafter choose between two general lines of study in preparation therefor. In one of these, special attention is paid to chemical theory as illustrated by the compounds of carbon. In the other, the application of chemical principles to problems of physiological chemistry is the main subject of inquiry. The former line of study is supplemented by two courses in physics; the latter by two courses in biology.

Among the subjects assigned this year to candidates for special honors, is an original investigation of "The preparation, character, and derivatives of Para-isobutyl-salicylaldehyde."

GEOLOGY.—The course in Mineralogy given this year will be omitted next year, and will probably in general be given hereafter only in alternate years. A course of different character will probably be given next year, the particulars of which will be announced hereafter.

An additional supply of apparatus and models for the study of crystallography and optical mineralogy has been ordered from Germany, and may be expected to arrive soon. The collection includes a Nörremberg apparatus, and a suite of sections of crystals, from Steeg & Reuter of Homburg; a reflecting goniometer, from Linhof of Munich; a suite of models illustrating wave surfaces and dispersion of optic axes in crystals, from Böhm & Wiedemann of Munich; and a suite of glass models of crystals, from Thomas of Siegen. The cost is to be

defrayed by contributions from friends of the College, solicited by the professor of the department. Contributions have already been received from C. C. Corbin, A. R. Crittenden, R. Lauder, A. M., M. D., C. A. Boardman, and D. H. Chase, LL. D. It is hoped that subscriptions for the remainder of the amount may be acknowledged in the next BULLETIN.

BIOLOGY.—A Journal Club for the study of bacteriological literature has been organized by Professor Conn with several advanced students. The work of the club is shared in by all of its members jointly, and consists of reports and discussions upon recent bacteriological investigations. The club meets weekly.

During the summer a special course in Comparative Embryology was given by Professor Conn at the Cold Spring Harbor Summer School. This course, being largely practical work upon marine embryos, cannot be given at a distance from the seashore, and the students of the biological department of the College have been encouraged to attend the summer courses. Five Wesleyan students have attended the summer school the past summer. Two scholarships paying free tuition in the Summer Laboratory have been established by H. T. Alexander, '90, and H. B. Slayback, '91. These scholarships are for Wesleyan students, and will be available for the session of 1895.

PRELIMINARY HONORS IN CLASSICS.

The following topics are specified for the examinations the present year, under the general regulations stated in the Catalogue. In all cases the examination is upon topics, and not upon specific books; but the books mentioned here will give an idea of the scope of knowledge required.

In Grammar: the subjects of prepositions, and of the use of tenses in Greek (Adams' Greek Prepositions, and a careful study of at least as much as is given in Hadley-Allen's and in Goodwin's Greek grammars); in Latin, the general subject of syntax (Madvig's Latin Grammar).

In Mythology: Murray's Manual of Mythology.

In Private Antiquities: Greek,—§ § 21-24, 31-53, 56, and 60 of Guhl & Koner's *Life of the Greeks and Romans* (Eng. trans.); Roman,—Preston and Dodge's *Private Life of the Romans* (Boston: Leach, Shewell & Sanborn).

In Literary History: Greek,—Jebb's *Primer of Greek Literature*; Roman,—Wilkins' *Primer of Roman Literature*.

In Political History: Greek,—the Peloponnesian War (Curtius' *History of Greece*, Vol. III., Eng. trans.); Roman,—the establishment of the military monarchy (Mommsen's *History of Rome*, Vol. IV., Eng. trans.)

NEW SCHEME OF ENTRANCE REQUIREMENTS IN ENGLISH.

In May last, a joint committee consisting of representatives from the New England Commission of Colleges on Entrance Examinations, the New England Association of Colleges and Preparatory Schools, and the Association of Colleges

and Preparatory Schools in the Middle States, met in conference in the city of Philadelphia to consider the matter of entrance requirements in English. After extended discussion the committee drew up a report containing a new scheme of English requirements. This report has already been adopted by both the New England associations represented in the Conference, and will in all probability be adopted by the Middle States Association at its annual meeting in December. There seems good reason to hope that, as a result of this action, the requirements for admission to college in this important department will soon be made uniform throughout the country.

The new scheme of requirements was adopted by the Faculty of this College, Oct. 16. So much of the report of the Philadelphia Conference as contains the new plan of admission requirements is here reprinted:

ENTRANCE REQUIREMENTS.

Note.—No candidate will be accepted in English whose work is notably defective in point of spelling, punctuation, idiom, or division into paragraphs.

I. READING AND PRACTICE. A limited number of books will be set for reading. The candidate will be required to present evidence of a general knowledge of the subject-matter, and to answer simple questions on the lives of the authors. The form of examination will usually be the writing of a paragraph or two on each of several topics, to be chosen by the candidate from a considerable number—perhaps ten or fifteen—set before him in the examination paper. The treatment of these topics is designed to test the candidate's power of clear and accurate expression, and will call for only a general knowledge of the substance of the books. In place of a part or the whole of this test, the candidate may be allowed to present an exercise book, properly certified by his instructor, containing compositions or other written work done in connection with the reading of the books.

The books set for this part of the examination will be:

1895—Shakspeare's Twelfth Night; the Sir Roger de Coverley Papers in *The Spectator*; Irving's Sketch Book; Scott's Abbot; Webster's First Bunker Hill Oration; Macaulay's Essay on Milton; Longfellow's Evangeline.

1896—Shakspeare's *Midsummer Night's Dream*; Defoe's *History of the Plague in London*; Irving's *Tales of a Traveler*; Scott's *Woodstock*; Macaulay's Essay on Milton; Longfellow's *Evangeline*; George Eliot's *Silas Marner*.

1897—Shakspeare's *As You Like It*; Defoe's *History of the Plague in London*; Irving's *Tales of a Traveler*; Hawthorne's *Twice Told Tales*; Longfellow's *Evangeline*; George Eliot's *Silas Marner*.

1898—Milton's *Paradise Lost*, Books I. and II.; Pope's *Iliad*, Books I. and XXII.; the Sir Roger de Coverley Papers in *The Spectator*; Goldsmith's *Vicar of Wakefield*; Coleridge's *Ancient Mariner*; Southey's *Life of Nelson*; Carlyle's *Essay on Burns*; Lowell's *Vision of Sir Launfal*; Hawthorne's *The House of the Seven Gables*.

2. **STUDY AND PRACTICE.**—This part of the examination presupposes the more careful study of each of the works named below. The examination will be upon subject-matter, form, and structure, and will also test the candidate's ability to express his knowledge with clearness and accuracy. The books set for this part of the examination will be:

1895—Shakspeare's *Merchant of Venice*; Milton's *L'Allegro*, *Il Penseroso*, *Comus*, and *Lycidas*; Macaulay's *Essay on Addison*.

1896—Shakspeare's *Merchant of Venice*; Milton's *L'Allegro*, *Il Penseroso*, *Comus*, and *Lycidas*; Webster's *First Bunker Hill Oration*.

1897—Shakspeare's *Merchant of Venice*; Burke's *Speech on Conciliation with America*; Scott's *Marmion*; Macaulay's *Life of Samuel Johnson*.

1898—Shakspeare's *Macbeth*; Burke's *Speech on Conciliation with America*; De Quincey's *Flight of a Tartar Tribe*; Tennyson's *The Princess*.

It will be noticed that the new scheme of requirements differs from the old in three principal particulars:

1. The examination in the correction of bad English is given up.
2. The books required are divided into two lists, one for reading, the other for more careful study.
3. In place of the impromptu essay which was formerly the principal part of the examination, the candidate is required to answer, at some length, several questions upon topics drawn from the books read.

LECTURES.

Arrangements are making for a series of lectures before the College, to which the public also will be welcomed. They will be held on Tuesday evenings in the College Chapel. The series will include a course of four or five scientific lectures or discussions in connection with the Middletown Scientific Association, a course upon subjects pertaining to civics, economics, and sociology, by eminent speakers from abroad under the auspices of the Citizenship Club, and a course by members of the Faculty on subjects connected with their several departments. Names, subjects, and precise dates cannot yet be announced, but it is probable that the combined series will occupy nearly every Tuesday evening until about the first of March.

In addition to these lectures may be mentioned the course of nine lectures by Professor Winchester—mentioned in the Department Notes—upon the poets, 1789-1832. These are given on Saturday evenings.

THE LIBRARY.

A statement of the urgent needs of the Library called forth definite action on the part of the Alumni at their last annual meeting. A committee of five

was appointed to raise \$2,500 for the immediate purchase of books. About one-fourth of that sum is already pledged, and it is expected that the appeal of the committee will meet with a ready response.

The Alumni also voted to purchase the library of the late Professor George Prentice and present it to the College. The committee appointed to raise money for that purpose has completed its work, and the books are now the property of the Library.

The class of 1894 voted to raise the sum of \$50 a year for three years, the money to be devoted to the purchase of books on political and social science. Much interest in the increase of the Library has also been shown by a large portion of the undergraduate student body.

The medical library of the late Jarvis N. Husted, M. D., '45, consisting of about one thousand volumes and five hundred pamphlets, was received last June. This library was presented to the College in accordance with the wishes of Dr. Husted.

Among other gifts received since last May, the following may be mentioned: A set of Reports of the United States Supreme Court and a set of Lawyers' Reports, Annotated, from B. A. Rich, '78; over two hundred Massachusetts publications from Hon. A. S. Roe, '70; a set of the *Methodist Review* and other books from Miss E. J. Mead of Stamford, Conn.; thirty-two volumes of *Nature* from Henry D. A. Ward of Middletown, Conn.; and nearly fifty official publications of the State of Iowa—Agricultural and Horticultural Reports, and Labor Statistics—from Rev. J. C. W. Coxe, '63.

Details concerning a gift for the purchase of mathematical and astronomical books will be found in the notes concerning the Mathematical Department.

THE MUSEUM.

Some important recent accessions to the Museum may be briefly noticed here, though a somewhat fuller account of them may be given in the Reports of the Museum.

Mr. Loper, the Curator of the Museum, spent the early part of the fall term of 1893 in collecting fossils in the vicinity of Cumberland, Md., and devoted a large amount of time during the remainder of the college year to the preparation and classification of the material obtained. The collection has proved to be one of great value, including 186 species and about ten times that number of specimens, representing the series of formations from the Medina to the Chemung.

A still more important collection of fossils was made in the past summer vacation by Mr. Loper in the vicinity of Cañon City, Col. Mr. Loper is now engaged in working up the collection. It is not yet determined how many species are represented. Fossils from the Silurian, Carboniferous, Jurassic, and

Cretaceous formations are included. Among the Silurian fossils are a large number of the remarkable specimens supposed to be remains of the notochordal sheaths of elasmobranch fishes, whose recent discovery has shown the origin of vertebrates to have been much more ancient than formerly supposed. Contributions towards the payment of the expense of this expedition have been received from A. R. Crittenden, Hon. O. V. Coffin, M. W. Terrill, and T. R. Pickering. It is hoped that other subscriptions may be acknowledged in the next BULLETIN.

Just before Commencement three valuable collections were received from the Smithsonian Institution: A collection of somewhat more than a hundred casts illustrating typical forms of American stone implements; a collection of about one hundred and fifty minerals; and a collection of about sixty lithological specimens. These collections are accompanied by printed descriptive labels, which add much to the utility of the specimens for popular instruction.

In the summer of 1892, Prof. L. N. Johnson, of the University of Michigan, a graduate of Wesleyan in the Class of 1884, presented to the Museum his entire mineralogical collection. On account of the absence of Prof. Rice, the boxes remained unopened during the ensuing college year. During the past year the collection has been catalogued, and much of it put upon the shelves. Prof. Johnson was an enthusiastic collector of minerals before he came to devote his attention more specially to Botany, and the collection contains many valuable specimens.

A small but choice collection of minerals has been received as a gift from the well-known mineralogist, W. W. Jefferis of Philadelphia. It includes specimens of the rare mineral, Jefferisite, of which Mr. Jefferis was the discoverer, and which was accordingly named in his honor.

INVESTIGATION OF FOOD AND NUTRITION.

The investigations of the chemistry and economy of food, to which reference has been made in previous numbers of the BULLETIN, have received a fresh impetus as a result of the action of Congress, which, at its last session, provided an appropriation of \$10,000 for an inquiry into the economy of the food of the people of the United States. The responsibility of the inquiry rests with the Secretary of Agriculture, who has placed the immediate direction in the charge of Prof. Atwater, as Special Agent in the Office of Experiment Stations of the Department of Agriculture. The general character of the inquiry is to be similar to that of which the beginnings have been made in the chemical laboratory of Wesleyan. The purpose is to distribute a considerable part of the work among such institutions as will render most efficient service. Some of the research is prosecuted here. The especial inquiries now going on in the chemical laboratory include those with the respiration and bomb calorimeters,

and studies of dietaries. They have to do with the application of the laws of the conservation of matter and of energy to the living organism, and are at the same time of the kind which are fundamental to the best understanding of the laws of nutrition. They are made in coöperation with the Storrs Experiment Station. Besides Professors Atwater and Rosa, the following gentlemen are sharing in these investigations and the work connected with them: C. D. Woods, B. S., C. F. Langworthy, Ph. D., Percy N. Evans, Ph. D., E. L. Slagle, Ph. D., H. M. Smith, M. S., A. P. Bryant, B. A., A. W. Smith, B. S.



CALENDAR.

1894.

- Sept. 27, Thursday, 9:00 A. M.,—College Year began.
Nov. 28, Wednesday, 12:00 M.,—Thanksgiving Recess will begin.
Dec. 1, Saturday,—Thanksgiving Recess will end.
Dec. 21, Friday,—Christmas Recess will begin.

1895.

- Jan. 3, Thursday, 7:50 A. M.,—Christmas Recess will end.
Jan. 31, Thursday,—Day of Prayer for Colleges.
Feb. 11, Monday—Feb. 16, Saturday,—Mid-Year Examinations.
Feb. 22, Friday,—Washington's Birthday, a holiday.
Apr. 10, Wednesday, 5:00 P. M.,—Easter Recess will begin.
Apr. 16, Tuesday, 7:50 A. M.,—Easter Recess will end.
May 2, Thursday,—Junior Exhibition.
June 26, Wednesday,—COMMENCEMENT.

—THE—

Wesleyan University Bulletin.

MIDDLETOWN, CONN.

MAY, 1895.—No. 16.

THIS number of the BULLETIN has been delayed a few days in order to secure the report, given on a following page, of the adjourned meeting of the Trustees, held in New York, May 14th.

The financial condition of the College as reported at this meeting of the Trustees is matter of satisfaction to all its friends. To be sure, the needs of the College, like those of every institution in healthy growth, are constantly in excess of its resources, and some of these needs at present are very urgent; but it is to be remembered that throughout the last two years of financial stringency the annual income of the College has fully met its annual expenditures, and that without any reduction of the teaching force or any contraction in the work or the facilities of the College. Next year it is probable there will be some increase in the number of the faculty and some additions to the courses of instruction offered.

In proof of the wisdom with which the funds of the College are invested, it may be stated that for the last two years not more than two thousand dollars of the whole endowment fund has at any time been unproductive.

It is hoped that our Alumni will not tire of the frequent repetition of the needs of the library. It is the one department of the College that has lagged behind in the general growth of the last fifteen years; and its needs, though perhaps not generally appreciated by the undergraduates, are sorely felt by all who attempt advanced work in any department. The care of the library has always been in an especial sense the concern of the Alumni. The present library fund was largely raised by Alumni subscriptions; for many years a committee on the library was appointed by the Alumni at their annual meeting. Is it too much to

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expect that the Alumni may again turn their attention to this need? It is to be regretted that the subscription started last summer has not quite reached the sum hoped for; why not take some measure at the approaching meeting of the Alumni for a more carefully concerted and prolonged effort in behalf of this fund?

As will be seen from the lists on a following page, the number of public lectures before the College during the past year has been unusually large. Especial credit is due to the students' Citizenship Club for securing the discussion of important social and economic questions by those men eminent in public life whose utterances on such questions have the weight of recognized authority.

Regular gymnasium drill under the charge of Mr. C. S. Aldrich, director, has been given to all the College classes during the past winter from the first of December to the first of April. This exercise was required only of the Freshman and Sophomore classes; but it was so popular that a large proportion of the members of the two upper classes were regularly in attendance on the days appointed for them. At the close of the winter term an attractive gymnastic exhibition was given in The Middlesex—the opera house of the city.

The new gymnasium has proved to be excellently adapted to its purposes; and the experience of the year has amply shown the value of opportunity for systematic physical exercise under a competent director.

The earlier months of the College year were darkened by a severe epidemic of typhoid fever. There were in all about thirty cases. Four students died, and several others were prostrated by illness so severe and protracted as to render it impossible for them to return to College during the present year.

It should be said that it has been conclusively proved that this epidemic was not due to anything in the condition of the College buildings or grounds. Careful investigation, undertaken by a committee of the faculty in concert with the Connecticut State Board of Health, showed, beyond all possibility of question, that the disease was contracted in every case by the eating of infected oysters at the initiation banquets of the College societies. The College had been almost entirely exempt from this type of disease during the whole period of its history; and it is gratifying to be assured that this epidemic was not due to any neglect of proper sanitary conditions, and that there is not the slightest reason to doubt the thorough healthfulness of the College and all its surroundings.

TRUSTEE MEETING.

An adjourned meeting of the Board of Trustees of Wesleyan University was held in New York City, May 14, 1895. The last adjourned meeting was held December 14, 1894, and therefore there was comparatively little business to transact.

The Board authorized the employment of an Associate Professor in the Department of Mathematics and Astronomy.

Leave of absence was granted to Professor Winchester during most of the Spring Term of 1896.

A new appraisal of the gymnasium was ordered, as none had been made since its completion. The members of the Executive Committee who are resident in Middletown were appointed the committee to make the appraisal.

The report of the Treasurer showed that the funds of the College have been very wisely invested. There has been very little loss of income during the financial stress of the past year.

DEPARTMENT NOTES.

LATIN.—A few changes and rearrangements will be made in the courses in Latin for next year:

Selections from the elegies of Ovid, Propertius, and Tibullus will take the place of the minor works of Tacitus in the second half-year of Course III.

The work of the first course in Latin Prose Composition (Course VII.) will be somewhat changed in character. It will begin with the systematic study of the elementary principles of Latin rhetoric, accompanied by brief practical exercises, and will proceed, in the second half-year, to the rendering into Latin of connected passages of modern historical and epistolary prose.

The course in Roman Private and Social Institutions (Course X.) will be extended to occupy two hours a week, and will require some collateral study of original authorities, and the careful preparation of note-books. Students desiring to elect this course must obtain the previous approval of the instructor.

Seniors and Juniors who obtain the approval of the instructor will be admitted next year to the course in Latin Epigraphy, which may be supplemented by a brief course in Latin Palæography, and will occupy two hours a week throughout the year. This course will probably take the place next year of the work of the Latin Seminary.

Under the new regulations, the examination for the Phi Beta Kappa prize will next year be based on Catullus (Course IV.)

GERMAN.—Next year a course in Old High German will be offered for the first time. Special attention will be paid to the history of German sounds. Braune's *Abriß der althochdeutschen Grammatik* and Braune's *Althochdeutsches Lesebuch* will be used in the class. Among the books recommended for reference are Wilmann's *Deutsche Grammatik*, Paul's *Grundriss der germanischen Philologie*, and Braune's *Althochdeutsche Grammatik*. Students intending to take this course are advised to take the course in Gothic.

ENGLISH LANGUAGE.—A course of weekly lectures on English Literature from the Norman Conquest to the Revival of Learning will be given next year. The aim of the course will be to show the relation of mediæval English literature to the contemporary literatures of Europe and to point out the materials that have been used in modern English literature. Particular attention will be devoted to the Arthurian Romances and to Chaucer.

This course will be elective for Juniors, and may be taken even by those who do not elect Course V. (Early English): on the other hand, all who elect Course V. are required to include this course.

PHILOSOPHY.—I. A special appropriation of \$500, to be expended in two years, was made at the beginning of 1894-95 for the purchase of books in philosophy. The plan adopted in the use of this fund has been to buy, first of all, works of standard value and to complete as far as possible our sets of philosophical periodicals. In pursuance of this plan the classical editions of Fichte, Schelling, and Hegel, Mullach's *Fragmenta Philosophorum Graecorum*, and complete sets of the *Philosophische Studien* and the *Philosophische Monatshefte* have been put upon our shelves or arranged for. In addition a number of works on Kant have been added to the library, and a somewhat special collection of eighteenth-century French writers, including Condillac, Helvétius, Diderot, Rousseau, and various commentaries.

2. The annual appropriation of \$150 for the beginning of a psychological laboratory has enabled the department to secure a few of the more essential instruments. In the past year a dynamometer, an æsthesiometer by Verdin, and a Hipp chronoscope have been purchased, as well as a rough model of the brain for class demonstration. A set of test weights for the illustration of Weber's law has also been ordered, and a standard brain model by Auzoux of Paris is expected by the opening of the next college year.

3. Course VII. on Modern Philosophy will hereafter be divided into two courses. The first, Modern Philosophy from the Renaissance to Kant, will be given in the first half year, two hours per week; the second, from Kant to the present time, two hours per week in the second half year. The courses will be so arranged that the first may be elected without the second, although the two will form a continuous discussion of the entire movement of modern thought.

4. The subject for the Philosophical Seminary, 1894-95 (second half year), will be the Philosophy of Lotze. The author's *Metaphysics* will form the center of the course; but the third book of his *Logic* will also be studied and reference will be made to his *Microcosmos* as well as to Herbart's *Metaphysik*.

5. Other probable changes in the elective courses in the department will be announced in the programme of studies to be issued later in the year.

PHYSICS.—On account of the prospective absence of Prof. Crawford in Europe during the next college year, the entire work of the department will be under the direction of Prof. Rosa. Extra assistance, however, will be provided in the laboratory courses.

The required course in elementary Physics, the elementary and advanced elective courses in Practical Physics, and the Journal meeting will be conducted as usual. Courses IV., V., VIII. and IX. will be omitted. The following courses not given this year will be offered next year, viz.:

An elementary course in Heat for the first term and in Electricity for the second and third terms.

An advanced course in the Mathematical Theory of Electricity, in continuation of Course VIII. as given this year.

A course in Alternating Currents of Electricity.

CHEMISTRY.—Besides the subject of the original investigation mentioned in the last BULLETIN, candidates for special honors in Chemistry will this year present original papers on the following subjects:—"Tertiary Isoamylphenol and its Derivatives," "Some Derivatives of Thiophenic Acid-amide," and "The Chemical Products formed by certain Lactic Ferments."

The investigations upon the food and nutrition of man, of which mention has been made in previous BULLETINS, are being continued in the chemical laboratory under the direction of Prof. Atwater. The appropriation of Congress for investigations of this sort in the United States was at the last session increased from \$10,000 to \$15,000. Besides Professors Atwater and Rosa, the following gentlemen at Wesleyan are sharing in these investigations and the work connected with them: C. D. Woods, B. S., C. F. Langworthy, Ph. D., Percy Norton Evans, Ph. D., R. L. Slagle, Ph. D., H. M. Smith, M. A., A. P. Bryant, B. S., A. W. Smith, B. S., H. A. Torrey, B. A.

GEOLOGY.—Instruction in Course I. is given this year exclusively by lectures, Le Conte's Compend, or Elements, of Geology being recommended for reference. The course is devoted almost entirely to Dynamical and Structural Geology. The characteristic rock formations and other effects due to each class of geological agencies are discussed in connection with the agencies themselves. The special aim of the course is to show the logic of Geology—the nature of the evidence on which geological conclusions are based.

The course in Mineralogy will be omitted next year, and will probably be given hereafter only in alternate years.

A course of lectures is to be given next year by the Professor of Geology on the Relations of Science and Religion. Special attention will be given to the history of the controversies occasioned by the Copernican astronomy, the geological discoveries relating to the antiquity of the earth and of man, and the doctrine of evolution.

In the last BULLETIN reference was made to some mineralogical apparatus recently purchased, and a list was given of contributors to the fund. The names of W. E. Sessions and Rev. C. H. Buck, A. M., should be added to the list.

BIOLOGY.—By a change in the order of studies, the course in General Biology and Botany begins immediately after the Christmas recess and runs uninterruptedly until Commencement. It is thus made possible to introduce a larger amount of practical work; and the Botany course is accordingly changed so as to include a considerable amount of microscopical study, and a more extended study of cryptogams.

The regular session of the summer school at Cold Spring Harbor will be held during the months of July and August. Attendance at this school is accepted as work for special honors in the department of Biology.

During the year 1895-96 Course VI. in Evolution will be omitted, and Course VII. in Bacteriology will be given in its place.

LECTURES AND PUBLICATIONS BY MEMBERS OF THE FACULTY.

PRESIDENT RAYMOND.—*Lectures.*—In addition to various addresses in different parts of the country, a lecture at the Middlesex Opera House in Middletown, January 17, on *The Blue and the Gray*. The lecture was afterwards repeated at New Britain.

Publication.—*Christianity and the Christ; a Study of Christian Evidences.* 12mo., pp. x. + 250, New York, Hunt & Eaton, 1894.

PROFESSOR RICE.—*Lectures.*—*The Skeptical and the Dogmatic Element in Religious Thought.* Vermont Methodist Seminary, Montpelier, Vt.

The Yellowstone National Park. Summer School, Cold Spring Harbor, N. Y.

What Instruction in Science is practicable in Primary Schools? Normal School, New Britain, Conn.

The Sandstones and Traps of the Connecticut Valley. Scientific Associations, New Britain and Bridgeport, Conn.; University Extension Society, Waterbury, Conn.

Evolution (4 lectures). University Extension Society, Waterbury, Conn.

Volcanoes. University Extension Society, Waterbury, Conn.

The Educational Work of the Methodist Church. Methodist Social Union, Boston, Mass.

Publications.—*Twenty-five Years of Scientific Progress, and other Essays.* 16mo., pp. v. + 174, New York and Boston, Thomas Y. Crowell & Co., 1894.

Science-teaching in the Schools. Second Edition. 12mo., pp. 73, Boston, D. C. Heath & Co., 1894.

The Credibility of the Resurrection of Jesus. *Methodist Review*, March-April, 1895.

PROFESSOR WINCHESTER.—*Lectures.*—Six lectures before Wells College.

Six lectures on six plays of Shakspeare, in South Manchester, Conn.

Eight lectures, under the auspices of the Society for University Extension, in Hartford, Conn., on *The Literature of the Age of Queen Anne*.

Nine lectures in the College Chapel, on English Poetry from Burns to Shelley.

Ten lectures on The Literature of the Victorian Period, on the Donovan Foundation, at Johns Hopkins University.

Ten lectures on The Literature of the Victorian Period, on the Thomas Foundation, at Richmond College, Richmond, Va.

Three lectures in Stamford, Conn. Single lectures in Newburgh, N. Y., New London, Conn., Philadelphia, North Adams, Mass., and before several schools.

In the Athenæum Press Series of English Classics, which is under the editorial supervision of Professor G. L. Kittredge of Harvard and Professor Winchester, the following volumes have been issued during the year:

Elizabethan Lyrics.—Edited by Professor Felix E. Schelling of the University of Pennsylvania.

Herrick.—Edited by Professor F. E. Hale, Jr., of the University of Iowa.

PROFESSOR CONN.—*Lectures*.—A course of thirty lectures on Comparative Embryology, at Cold Spring Harbor, in July and August, 1894.

A lecture on The Bottom of the Sea, at Cold Spring Harbor, July 10. Repeated at Bridgeport, November 20, at New Britain, December 17, and at Hartford, January 8.

A lecture at Davisville, Conn, November 15, on Bacteria on the Farm.

A lecture at Middletown, February 28, 1895, on The Evolution of Life.

A lecture at Norwalk, February 26, on A Biologist's View of the Doctrine of Christianity.

A lecture at Waterbury, April 26, on The Flowers' Use of Fruits.

Publications.—The Milk Supply of Our Cities. *Century*, July, 1894.

The Microscope in the Dairy. *The Microscope*, July, 1894.

The Oyster Epidemic of Typhoid at Wesleyan. *New York Medical Record*, December, 1894.

The Outbreak of Typhoid Fever at Wesleyan University. *Report of State Board of Health of Connecticut*, 1894.

The Biological Laboratory of the Brooklyn Institute. *American University Magazine*, December, 1894.

The Cold Spring Harbor Biological Laboratory. *American Naturalist*, March, 1895.

(1) Experiments in Ripening Cream with Bacillus No. 41. (2) Cream Ripening with Pure Cultures of Bacteria. *Annual Report of Storrs Agricultural Experiment Station*, 1894.

Cream Ripening with Bacillus No. 41. *Cent. für Bac. und Par.*, May, 1895.

History of Bacillus No. 41. *Chicago Produce*, April, 1895.

PROFESSOR ARMSTRONG.—*Publications*.—The Imagery of American Students (with the assistance of C. H. Judd, '94). *Psychological Review*, September, 1894.

Die Philosophie in den Vereinigten Staaten. *Zeitschrift für Philosophie*, Band 105.

A Review of Ladd's Philosophy of Mind. *Psychological Review*, May, 1895.

PROFESSOR MEAD.—*Publication*.—Glimpses of a Faroese Village. *Wesleyan Literary Monthly*, May, 1894.

PROFESSOR KUHN.—*Lectures*.—A course of six lectures, on French Literature in the Nineteenth Century, in Hartford, March 15 to April 5, under the auspices of the Connecticut Society for University Extension.

A paper on The Origin and Vicissitudes of the Surname Kuntz, read before the Pennsylvania German Society at Reading, Pa., October, 1894.

Publication.—A Selection from the Poetry and Comedies of Alfred de Musset. 12mo., pp. xxxvii. + 282. Boston, Ginn & Co.

DR. EICHELBERGER.—Observations of Encke's Comet. *The Astronomical Journal*, No. 339.

Observations of Small Planets 130 and 287. *The Astronomical Journal*, No. —.

These observations were made with the 12-inch Refractor at the Wesleyan University Observatory.

PROFESSOR ROSA.—*Lectures*.—A course of six lectures in December and January at New Haven, on The Production of Electric Currents and their Application to Lighting and Motive Power.

A course of six lectures running from January to April at Waterbury, on The Production of Electric Currents and their Use in Electric Motors.

A course of six lectures from February to April, at Meriden, on the same subject.

A lecture, December 3, at New London, on Statical Electricity.

All of the above were under the auspices of the respective local centers of the Connecticut Society for University Extension.

A lecture, January 15, before the Bridgeport Scientific Association, on Electric Motors.

A lecture, February 11, before the New Britain Scientific Association, on Electric Meteorology.

A lecture, March 14, in the Young People's Course, at Middletown, on Electricity and Lighting.

DR. GOODWIN.—*Publication*.—The Poet in an Age of Science. *New World*, March, 1895.

MR. SHAW.—*Publications*.—Three articles in the *Psychological Review*, May, 1895: Memory for Square-Size; Types of Reaction; Further Experiments on Memory for Square-Size; the first two in collaboration with Prof. J. Mark Baldwin, the last with H. C. Warren.

MR. KNOWLES.—*Publications*.—Editor of *Wesleyan Verse*, selected from the Undergraduate Publications of Wesleyan University. 16mo., pp. 112. Hartford, Conn, 1894.

New England: A prize poem read before the New England Society, of Orange, N. J., at their twenty-fifth anniversary.

American Literature's Debt to the College. *University Graduates' Magazine*, March, 1895.

JUNIOR EXHIBITION.

The annual Junior Exhibition was held in the College Chapel on the evening of Thursday, May 2, 1895. The Committee of Award consisted of Rev. A. W. Hazen, D. D., Rev. John Townsend, M. A., and Mr. W. W. Wilcox, Jr., M. A. The first prize was awarded to George Miles Moody, of Troy, N. Y., who discussed The Significance of the Present Industrial Discontent; the second prize, to Edmund D. Searls, of Chelsea, Me., whose subject was Science as a Factor of Civilization. Honorable mention was made of Vernon Benjamin Swett, of South Paris, Me., who spoke on The College Man and Current Reform.

CITIZENSHIP CLUB COURSE OF LECTURES.

December 6, 1894.—Hon. Carroll D. Wright, "Some Aspects of the Labor Problem."

February 19, 1895.—Hon. Martin A. Knapp, '68, "The Railway Problem."

March 5.—Hon. Roswell G. Horr, "The Monetary Situation in the United States."

March 14.—Walter H. Page, "How to Influence Public Opinion."

March 28.—Booker G. Washington, "The Negro and the South."

May 11.—Debate on the question "Resolved that a Protective Tariff is Advantageous in the United States." Affirmative, Hon. Roswell G. Horr; negative, Hon. Michael D. Harter.

MIDDLETOWN SCIENTIFIC ASSOCIATION.

The following topics have been discussed at the meetings of the Middletown Scientific Association since the last report in the BULLETIN:

May 11, 1894.—The New Topographical Map of Connecticut, W. N. Rice. Studies in Diaries, H. B. Gibson.

June 12.—A New Electric Motor, E. B. Rosa. Digestibility of Food, W. O. Atwater.

Oct. 9.—Food and Progress, W. O. Atwater.

Nov. 13.—The Evolution of Animal Life, H. W. Conn.

Dec. 12.—The Liquefaction of Air and the so-called Permanent Gases, M. B. Crawford. The Typhoid Epidemic, H. W. Conn.

Jan. 8, 1895.—Paleontology and Evolution, W. N. Rice.

Feb. 12.—The Planet Mars, W. S. Eichelberger. Field-work in Paleontology, S. W. Loper.

March 12.—The New Chemical Element—Argon, H. A. Torrey. The Discovery of Antitoxine, H. W. Conn.

April 23.—Some Questions Relating to the Evolution of Man, W. N. Rice.

May 14.—The New Psychology, A. C. Armstrong, Jr. Bimetallism, W. C. Fisher.

A NEW CLUB.

Fourteen members of the Faculty, whose interests lie in the departments of literature and language, history, philosophy and sociology, have formed a club for the discussion of topics of interest to the members, as well as for social purposes. The club meets once a month, at the residence of one of the members. The officers for this year are: President, C. T. Winchester; Vice-President, E. T. Merrill; Secretary and Treasurer, F. W. Nicolson. Following is a list of papers which formed the basis for discussion at the first five meetings of the club:

1. Recent Progress in Roman Archaeology and Latin Literature, E. T. Merrill.
2. Nature in the Divine Comedy, L. O. Kuhns.
3. A Review of Kidd's "Social Evolution," W. C. Fisher.
4. Sir Thomas Malory's "Morte Darthur," W. E. Mead.
5. An Ancient Superstition, with some Modern Forms, F. W. Nicolson.

RECENT COLLEGE APPOINTMENTS.

CLASS.

1879. Albert Mann, Jr., Professor of Biology, Ohio Wesleyan University.
1880. Myron Reed Sanford, Professor of the Latin Language and Literature, Middlebury College.
1887. Benjamin Franklin Sharpe, Fellow, Clark University.
1887. Samuel Newton Taylor, Fellow, Clark University.
1888. Aaron Louis Treadwell, non-resident Fellow, Chicago University.
1890. John Andrew Bergström, Assistant Professor of Psychology and Pedagogy, Indiana University.
1890. Charles Manning Child, Fellow, Chicago University.
1890. Frank Burnett Dains, Fellow, Chicago University.
1892. Lincoln Robinson Gibbs, Instructor in English, Lehigh University.

1892. Duncan Starr Johnson, Assistant in Biology, Johns Hopkins University.
1893. Charles Gourlay Goodrich, Professor of German, Albion College.
1894. William Merrill Esten, Assistant in Biology, Wesleyan University.
1894. Robert Elmer Hendershot, Assistant Librarian, Wesleyan University.
1894. Rupert Henry Hopkins, Assistant in Physics, Wesleyan University.
1894. Frederic Lawrence Knowles, Assistant Secretary of the Faculty, Wesleyan University.
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THE MUSEUM.

In the last BULLETIN reference was made to the valuable collections made by Mr. Loper last summer in his expedition to Colorado. A more definite inventory can now be given of the material thus acquired, which proves to be an even more valuable accession than was supposed. The collection includes 995 specimens of Paleozoic fossils, representing 72 species; 1065 specimens of Mesozoic fossils, representing 74 species; and 373 specimens of minerals, rocks, and miscellaneous objects.

Within the last few weeks, special attention has been attracted to the rare mineral Uraninite, found in the quarry formerly known as Hale's Quarry (now belonging to Mr. James K. Andrews) in Portland, since it has been shown probably to contain the elements Argon and Helium. In a recent visit to the quarry, Mr. Loper has succeeded in obtaining a large number of specimens of the mineral. A quantity of the material has been sent to Prof. Ramsay in England, and another lot to Prof. Hale in Chicago, for use in the further prosecution of investigations on the new elements.

THE AMERICAN SCHOOL OF CLASSICAL STUDIES IN ROME.

The long-mooted scheme of an American School in Rome under the patronage of the Archaeological Institute of America, and in affiliation with the American School in Athens, found realization in a permanent organization under the above title, effected at New York on the nineteenth of the present month.

The School will open in Rome next October, and will have its quarters in the magnificent Aurora Casino of the old Villa Ludovisi on the Pincian Hill, which will also be occupied by the lately-established School of American Architects. The managing committee is made up of a considerable number of representative scholars in Latin and Archaeology from various American colleges, and of men in other walks of life who are interested in the subjects of study contemplated by the School. The chairman and secretary of the committee are Professor W. G. Hale, of the University of Chicago, and Professor A. L. Frothingham, Jr., of Princeton College, who are also to be resident in Rome during the first year of the School as its directors. The precise courses of instruction to be offered at first will be determined by them.

H. W. Conn, - - - - -	\$25 00
M. B. Crawford, '74, - - - - -	25 00
R. S. Douglass, '61, - - - - -	50 00
L. R. Gibbs, '92, - - - - -	5 00
R. H. Gidman, '63, - - - - -	5 00
B. Gill, '70, - - - - -	5 00
F. K. Hallock, '82, - - - - -	20 00
C. W. Hawkins, '86, - - - - -	5 00
B. Hawley, '38, - - - - -	10 00
R. S. Ingraham, '88, - - - - -	10 00
W. J. James, '83, - - - - -	25 00
J. S. Judd, '85, - - - - -	5 00
W. V. Kelley, '65, - - - - -	15 00
M. A. Knapp, '68, - - - - -	50 00
D. C. Knowles, '58, - - - - -	10 00
L. O. Kuhns, '85, - - - - -	25 00
W. D. Leonard, '78, - - - - -	25 00
D. A. Markham, '79, - - - - -	10 00
W. E. Mead, '81, - - - - -	25 00
W. H. Peters, '70, - - - - -	3 00
B. P. Raymond, - - - - -	100 00
G. G. Reynolds, '41, - - - - -	100 00
W. N. Rice, '65, - - - - -	25 00
G. L. Roberts, '59, - - - - -	100 00
E. B. Rosa, '86, - - - - -	25 00
H. D. Simonds, '76, - - - - -	25 00
A. W. Smith, '91, - - - - -	5 00
W. L. Snow, '94, - - - - -	2 00
E. C. Snyder, '94, - - - - -	2 00
S. L. Sprague, '46, - - - - -	5 00
W. K. Stetson, '81, - - - - -	10 00
S. M. Stiles, '60, - - - - -	10 00
W. H. Sutton, '57, - - - - -	10 00
J. H. Taft, - - - - -	100 00
R. E. Thompson, '92, - - - - -	5 00
H. H. Ward, '79, - - - - -	10 00
H. Weich, '87, - - - - -	50 00
T. D. Wells, '88, - - - - -	5 00
Mr. and Mrs. I. G. Westgate, '90, - - - - -	15 00
G. Whitaker, '91, - - - - -	10 00
T. S. Wiles, '93, - - - - -	10 00
C. T. Winchester, '69, - - - - -	100 00

 \$1,254 00

It is earnestly to be hoped that the Alumni and other friends of the College will awake to the fact that the present fund is altogether inadequate for the proper maintenance of the library. Many members of the faculty are obliged to expend yearly four or five times as much money upon their own working books as the library provides for an entire department. The greatest lack appears in technical periodicals and other special publications that are indispensable for advanced work in higher classes. The departments of science, in their practical work, are entirely dependent upon laboratories; the departments of literature, language, philosophy, history, and economics, in their practical work, are equally dependent upon books.

The books from the library of the late Professor Prentice have been shelved temporarily on the third floor of the library building, and, although not yet catalogued, are used in supplementing the resources of the library. The Prentice library consists of 1,569 bound volumes, 326 unbound volumes, of which nearly one-half are worth binding, and 612 miscellaneous pamphlets, periodicals, and catalogues all unbound. It is especially rich in books in German literature, and French and German theology. The net addition to the library will be about one thousand volumes.

The treasurer of the class of 1894 has paid in \$23 toward the class fund of \$50 a year for three years. This money has been spent in accordance with the direction of the class for books in the department of political and social science.

From Jan. 1st to April 30th, 1895, the library has received as gifts 245 bound volumes and 568 pamphlets. The principal donors were A. C. Bruner, '79, 110 volumes and 1 pamphlet; Hon. O. H. Platt, 41 volumes; United States Government, 16 volumes and 99 pamphlets; Hon. J. P. Pigott, 13 volumes and 4 pamphlets; Hon. T. E. Hancock, '71, 10 volumes; and H. C. Williams, '85, 10 volumes. Alumni and friends of the College who have books which they are ready to give the College are urged to correspond with the librarian on this matter.

OBITUARY RECORD.

The following deaths among the Alumni have been reported since the publication of the last Obituary Record:

CLASS.

- 1839. Ashley Rensselaer Northrup, b. 15 March, 1814, in Pompey, Onondaga Co., N. Y.; d. 1 September, 1894, in Macomb, Ill.
- 1840. Chauncey Shaffer, b. 4 June, 1818, in Lisle (now Barker), Broome Co., N. Y.; d. 15 May, 1894, in New York.
- 1844. James Strong, b. 14 August, 1822, in New York; d. 4 August, 1894, at Round Lake, N. Y.
- 1845. Hiram Francis Savage, b. 16 October, 1819, in Edinburgh, Saratoga Co., N. Y.; d. July, 1894, in South Glens Falls, N. Y.

1847. Henry A. Coolidge, b. 12 July, 1822, in Forestville, Chautauqua Co., N. Y.; d. 31 October, 1894, in Washington, D. C.
1847. Cornelius Wortendyke Lafayette Morrow, b. 16 August, 1824, in Paterson, N. J.; d. 24 March, 1895, in Huntington, Long Island, N. Y.
1848. Ebenezer Hodsdon, b. in Berwick, York Co., Me.; d. 22 August, 1894, in Corning, Mo.
1849. John Pegg, b. 10 March, 1827, in Coventry, England; d. 18 June, 1894, in New Rochelle, N. Y.
1851. Cadford Mellen Dinsmore, b. 20 August, 1826, in Windham, Rockingham Co., N. H.; d. November, 1894, in Exeter, N. H.
1854. William Milton McLaughlin, b. 29 December, 1829, in West Winfield, Herkimer Co., N. Y.; d. 18 May, 1895, in Brookfield, Mass.
1855. Charles Candee Baldwin, b. 2 December, 1834, in Middletown, Conn.; d. 2 February, 1895, in Cleveland, Ohio.
1856. Edward Johnson, b. 20 April, 1831, in Lynn, Mass.; d. 24 February, 1894, in Lynn, Mass.
1866. George Clifford Carpenter, b. 29 March, 1840, in Nelson, Madison Co., N. Y.; d. 1 October, 1894, in Indianola, Iowa.
1870. Edward Hyde Rice, b. 27 October, 1848, in Boston, Mass.; d. 9 May, 1895, in Springfield, Mass.
1875. William Albert Cottle, b. 21 February, 1849, in North Tisbury, Mass.; d. 20 November, 1894, in Mattoon, Wis.
1885. Charles Sumner Van Deusen, b. 14 December, 1863, in New Brunswick, N. J.; drowned 17 August, 1894, at New Haven, Conn.



CALENDAR.

1895.

- June 6, Thursday, 7:30 P. M.,—Junior Prize Debate.
- June 21, Friday, 7:30 P. M.,—Freshman, Sophomore and Junior Declamation.
- June 23, Sunday, 10:30 A. M.,—Baccalaureate Sermon, Rev. Bradford Paul Raymond, D. D., LL. D.
- June 23, Sunday, 7:30 P. M.,—University Sermon, Rev. A. J. F. Behrends, D. D.
- June 24, Monday, 11 A. M.,—Public Awarding of Prizes.
- June 24, Monday, 2 P. M.,—Class Day Exercises.
- June 24, Monday, 8:00 P. M.,—Glee Club Concert.
- June 25, Tuesday, 9:00 A. M.,—Annual Meeting of Board of Trustees.
- June 25, Tuesday, 9:00 A. M.,—Meeting of the Φ . B. K. Fraternity.
- June 25, Tuesday, 10:00 A. M.,—Business meeting of the Alumni Association.
- June 25, Tuesday,—Reunions of Classes of 1845, '60, '65, '70, '80, '85, '88, '92.
- June 25, Tuesday, afternoon,—Receptions by the College Fraternities.
- June 26, Wednesday, 10:00 A. M.,—COMMENCEMENT.
- June 26, Wednesday, afternoon,—Commencement Dinner.
- June 26, Wednesday, evening,—President's Reception.
- June 27, Thursday, 9:00 A. M.,—Examination of candidates for admission begins.
- Sept. 25, Wednesday, 9:00 A. M.,—Examination of candidates for admission begins.
- Sept. 26, Thursday, 9.00 A. M.,—First Term begins.

—THE—

Wesleyan University Bulletin.

MIDDLETOWN, CONN.

NOVEMBER, 1895.—No. 17.

IT HAS been thought wise to vary somewhat, for once, the usual character of the BULLETIN. The aim of this special number is to give such general information concerning the college as can hardly be included in the catalogue, and yet is constantly called for by those contemplating a college course.



In order to present the work and life of the college from different points of view, brief articles have been included not only from the faculty, but from the alumni and from the undergraduates. All who are interested in obtaining more detailed information on any point are invited to write to the Secretary of the Faculty for a catalogue.

C. T. WINCHESTER, <i>Chairman,</i>	}	<i>Committee.</i>
W. E. MEAD,		
W. C. FISHER,		
F. W. NICOLSON, <i>Secretary,</i>		

WESLEYAN UNIVERSITY.

BY REV. BRADFORD P. RAYMOND, D. D., LL. D., PRESIDENT.

Foundation and Aims of the College.—Wesleyan University was founded in 1831. It is the oldest of the colleges established under the auspices of the Methodist Episcopal Church. Several were established earlier, but for various reasons were closed. Wesleyan has the longest continuous history. One of the purposes of its founders was to provide an educated ministry for the church. For many years a very large percentage of Wesleyan graduates entered the ministry, but the growing demand for educated men in all the professions and all the walks of life has met a response at Wesleyan as in all the colleges, and the proportion of her graduates now choosing this calling is about the same as that entering some of the other professions. In the years 1863–1872 the maximum percentage of graduates entering the ministry was reached, 51 per cent. becoming members of conferences. Since then the number has rapidly fallen; in the last decade it was only 17 per cent.

Wesleyan is not a sectarian school. It is under the patronage of the Methodist Episcopal Church, but several of its professors are members of other churches, as are also some of its trustees. Its student body is made up of those coming from all denominations, and from no denomination. Its doors are open to all alike.

Wesleyan has always maintained a reputation for scholarly work. Her location in the heart of New England demanded this from the beginning. She was brought into contact with the old New England colleges, which had the advantage of a century and more of growth when Wesleyan was planted. Her first President and the men who constituted her faculty in the first quarter-century of her history were men of high ideals, and were the ripest scholars of the church. In this environment and moulded by the influences of these men, she could not do otherwise than establish a curriculum that should compare favorably with the curricula of the institutions about her. This reputation she has maintained until the present. The large proportion of her alumni now occupying prominent positions in the learned professions and the world of letters is a result of this policy.

Endowment.—The endowment of the college is secure, and is productive almost to the last thousand dollars. The productive endowment for the year 1894–95 was \$1,101,623.81 and the whole endowment \$1,140,123.81. This money is expended in legitimate college work; there is no preparatory school, nor any professional schools. Movements are on foot at the present time which we trust will materially increase our endowment.

College Charges, and Aids to Students.—The average annual charge for students rooming in the college buildings, including heating, library fees, tuition, and incidentals, and exclusive of laboratory fees, amounts to \$143.

A large number of free scholarships, covering wholly or in part the charge of \$75 for tuition, are at the disposal of the President for the benefit of needy and

worthy students. The amount devoted to this purpose for the year 1895-96 is \$12,000. This is sufficient to help every student who is really needy and worthy. The Squire Scholarship, amounting to about \$250, and the Evans Scholarship, amounting to \$100, are awarded annually, the former only on condition that the holder shall pursue a year of graduate classical study, either at Middletown, or in connection with travel or residence abroad. Twenty-three prizes are offered annually, ranging from \$10 to \$50 in amount.

Employment is found for a few men about the college, and a large number of students find work to do about the town. The educational loan fund of the



THE CAMPUS, FROM THE SOUTHEAST.

church enables us to secure about \$75 a year each for a considerable number of students recommended by the church and by the faculty for such aid. This sum is loaned without interest until two years after graduation, a provision which enables many to pay their indebtedness before interest begins to accrue. There is also a small college fund, which is held for Juniors and Seniors. A large number of students have been enabled to complete their course by a loan of \$50 a year for two years from this fund. Cases of emergency are often relieved in other ways. The man who is in good health, is ready and willing to work, very rarely has occasion to leave Wesleyan on account of poverty. The man is

held in honor at Wesleyan who thinks enough of his privileges to be willing to work in order to enjoy them.

Government.—In the government of the college the alumni and the undergraduates are important factors. The alumni have for a long time had a large representation on the board of trustees. Arrangements have recently been made by means of which the whole body of alumni, whether present or absent, participate in the election of their representatives to this board. A committee made up of ten students appointed by the student body, and four members of the faculty including the President, constitutes a conference committee. And while the responsibility for the government of the college rests with the faculty, the student members of this committee, with the coöperation of the student body, have done excellent work in the way of establishing the principles of honor and manliness, as those which should govern men in college as well as out of it. We have confidence in the Wesleyan students. Much credit is due them for the uninterrupted good order of the last three years.

LOCATION, BUILDINGS, GROUNDS.

BY PROF. C. T. WINCHESTER.

It was an accident that originally located Wesleyan University in Middletown; but it was a fortunate accident. A better location for a college could hardly be found. Middletown, as its name may imply, is almost exactly half way, on the shortest railway route, between New York and Boston—the only stopping place of the fastest train between those cities—and is thus easy of access from any direction. It is large enough to afford all the modern conveniences of city life, while it is free from the distractions and temptations of our largest towns. It is, moreover, one of the most beautiful cities of New England; in point of beauty and healthfulness an ideal place of residence. It lies on the side of a hill that slopes gently up from the west bank of the Connecticut river for nearly a mile. The surrounding country is the most attractive region of Southern New England; and a walk of two miles from the center of the town in any direction will afford a succession of most delightful views of hill, valley, and river.

The college occupies extensive grounds in the highest part of the city and on its finest street, and commanding charming prospects of the river and the distant eastern hills. Its buildings and material equipment are worthy its location. Of the ten principal college buildings, five—all of stone and of pleasing architectural effect—stand in line on the front campus facing High street. At the northern end of the line is the venerable North College, which stood here when the college was founded. This is the principal dormitory building; and two years ago was entirely refitted throughout, finished in hard woods, heated by

steam, and made the equal of the most modern buildings of its class. Beyond it stands South College, now used for lecture and seminary rooms, the Chapel, the Library, and the Judd Hall of Science, in which are housed the departments of chemistry, geology, and biology, and the natural history collections. In the rear of this main line are the Observatory and its transit house, the Physical and Electrical Laboratories, engine house, and the large and elegant Gymnasium erected last year. To these buildings should be added the President's Mansion in one corner of the front campus, and Webb Hall—the Ladies' Dormitory—on



VIEW OF MIDDLETOWN. FROM HIGH STREET.

the opposite side of High street. The total value of the college buildings at present is about \$450,000.

Mention should perhaps be made also in this connection of the society club-houses of the students, grouped about the college grounds, on or near High street. Some of them are models of architectural beauty and convenience.

The campus, in which the principal college buildings stand, occupies nearly two entire city squares, and contains about fourteen acres. The larger half of this campus, in the rear of the main line of buildings, is divided between the two athletic fields. One of them, adjoining the new gymnasium, is devoted to field and track athletics, the other to football and baseball.

ADMISSION AND COURSES OF STUDY.

BY PROF. F. W. NICOLSON, SECRETARY OF THE FACULTY.

ADMISSION.—Examinations for admission to Wesleyan University are held both in June and September. A candidate may present himself for either preliminary or final examination. In the former case, if he succeeds in passing in half or more of the subjects required for admission, his record will hold until such later time as he may desire to complete his examination.

Certificates.—Certificates covering the work of students in preparation for college are accepted, under certain regulations, from a number of schools approved by the faculty. Regents' diplomas and pass cards supplementary to such diplomas will be received in lieu of examination in the subjects which they cover. In the following subjects, however, certificates and Regents' diplomas are not accepted: Sight-reading of Latin and Greek, Latin and Greek Prose Composition, French, German, English (Study and Practice), Natural Science.

Advanced Standing.—A candidate may be admitted to advanced standing after examination in the preparatory studies and also in those previously pursued by the class which he proposes to enter. The examinations in this case are oral and intended to test the candidate's general proficiency, rather than his knowledge of details of the subjects which he has pursued.

Following is a brief statement of the requirements for admission to each of the three courses described below. Fuller details may be found in the catalogue, which no intending candidate should fail to consult.

I. Classical Course.

Latin: Grammar, four books of Caesar, six Orations of Cicero, the Eclogues and six books of the Aeneid of Vergil, Translation at sight of both Prose and Poetry, Composition.

Greek: Grammar, four books of Xenophon, three books of Homer, Translation of passages from Xenophon at sight, Composition.

History and Geography: History of Rome to the death of Marcus Aurelius, and of Greece to the capture of Corinth; Ancient Geography.

Mathematics: Algebra through Progressions, including the use of the Binomial Theorem for Positive Integral Exponents; five books of Plane Geometry.

English: The examination is divided into two parts, Reading and Practice, and Study and Practice. In the former a candidate is examined on the subject matter of a limited number of books assigned for reading, and is asked to write a paragraph or two on each of several topics assigned from the books in question. For the examination in Study and Practice a smaller number of books is assigned, and the examination covers not only the subject matter, but also the form and structure of the works read.

II. Latin-Scientific Course.

The requirements are the same as for the Classical Course, except that the candidate is examined in either French or German instead of Greek (the

requirement in Greek History and Geography, however, remaining unchanged). Such a knowledge of the modern language is required as will enable the candidate to read easy passages at sight and to answer elementary grammatical questions.

III. Scientific Course.

The candidate has here the option of the three following series of requirements: Course A. (1) Mathematics, as in the Classical Course, with the addition of Solid Geometry, Plane and Spherical Trigonometry and Analytical Geometry; (2) English and (3) French or German, as in the Classical Course; (4) Natural Science, either Botany and Physical Geography, or Elementary Physics, or Elementary Chemistry. Course B. (1) Mathematics and (2) English, as in the Classical Course; (3) Natural Science, as in Course A; (4) French and German, the equivalent of the following courses as given in Wesleyan University (see catalogue): Course I. in both French and German, and Course II. in either French or German. Course C. (1) Mathematics and (2) English, as in the Classical Course; (3) French or German, as in Course A; (4) Natural Science, all three requirements specified under Course A.

COURSES OF STUDY.—The college presents to its undergraduate students the option between three courses of study, each extending through four years, named respectively the Classical, Latin-Scientific and Scientific, and leading to the respective degrees of B. A., Ph. B., and B. S. In the Classical Course the study of Greek and Latin is required in the Freshman year and must be continued also, though to a more limited extent, in the Sophomore year, unless the student elects a considerable portion of his studies from the departments of Mathematics and Physics. In the Latin-Scientific Course Greek is omitted, and in the Scientific Course both Greek and Latin are omitted, in order to give more extended opportunity for the study of Modern Languages, Science and Literature.

In each of the courses mentioned above nearly all the studies of the first year are required. In the three remaining years the amount of required work is progressively diminished, the student being allowed to complete his quota of hours by selecting from the elective studies in the various departments. The quota of regular studies in the Sophomore, Junior and Senior years is such as to require for a minimum 14 hours of class-room work a week, exclusive of rhetorical exercises. The range of electives open to students will appear from the statement that 125 separate courses are offered in this year's catalogue (20 of them being, however, "alternate" courses, *i. e.*, offered in alternate years). These courses are distributed among the various departments as follows: Latin, 15; Greek, 9; German, 7; Romance Languages, 7; English Literature, 7; English Language, 8; Elocution, 2; History, 5; Economics, 6; Philosophy, 10; Ethics, 4; Mathematics and Astronomy, 12; Physics, 12; Chemistry, 10; Geology, 4; Biology, 7.

Special Courses.—Students who do not desire to complete one of the regular courses may receive instruction in such studies as they may select, provided they prove themselves on examination qualified to pursue them with advantage.

INSTRUCTION,—AIMS, METHODS, FACILITIES.

I. SCIENCE.

BY PROF. W. N. RICE.

The number of courses, required and elective, offered to students of Wesleyan in the scientific departments, is 46. These may be classified as follows:—Mathematics, 3; Astronomy, 2; Physics, 14; Chemistry, 10; Geology, 5; Biology, 7.

The teaching force includes ten professors and other instructors in charge of classes. Besides these, however, there are six assistants in the laboratories and museum, so that the whole number of workers who help to make a scientific atmosphere, and who, by informal conversation as well as by formal lecture, help and inspire the student of science, is sixteen.

The material equipment, though not all that the ambition of progressive instructors desires, is sufficient for excellent work in all the scientific departments.

The equatorial telescope, with its 12-inch object-glass, is one of the telescopes of good reputation among the observatories in this country. The transit instrument, clocks, chronograph, spectroscope, etc., make an outfit sufficient to give the student a thorough training in most kinds of astronomical observation. The supply of transits, levels, sextants, etc., is ample for practice in elementary and geodetic surveying.

The physical laboratory is supplied not only with the apparatus required for the ordinary lecture-room experiments, but with apparatus for precise measurements of the various physical quantities, so as to afford the means of training in physical investigation. The immense advance in electrical science and its applications characteristic of the last two decades has been recognized by the equipment of an electrical laboratory provided with apparatus of precision for the quantitative study of electrical phenomena.

Chemistry is the study in which the laboratory methods of teaching were first brought into prominence, and the chemical laboratory was the first of the laboratories developed in Wesleyan University. In the very early days of the college, the inventive genius of Prof. Johnston gained a reputation for brilliant experimental illustration; and, ever since the building of Judd Hall in 1871, laboratory work in chemistry has held a prominent place in the curriculum.

The museum affords abundant material for the study of geology, mineralogy, and systematic botany and zoology. It is especially rich in the minerals of the famous region in which Middletown is situated, and in specimens of some groups of North American animals. A special collection illustrative of dynamical geology is very serviceable in class-room work. The collection in paleontology has been greatly improved by expeditions made by the curator within the last three years.

The mineralogical department is supplied with apparatus for the study of optical mineralogy and petrography.

The biological laboratory is well supplied with microscopes, microtomes, and other appliances for morphological and histological study. A beginning has been made in the line of apparatus for quantitative measurement of physiological processes and other modes of physiological research. The immense advance in the importance of bacteriology within the last decade has been recognized in the equipment of a bacteriological laboratory.

It is the aim of the instructors in the scientific departments to make the teaching thoroughly up to the times in method and spirit. The mathematical department has been honorably distinguished in all the history of the college for



JUDD HALL.

the thoroughness of its work and the intellectual inspiration imparted to the students. In the sciences which are in large part observational sciences, the effort is to bring the student face to face with nature. In physics, chemistry, and biology, laboratory work has been made increasingly prominent, and much thought has been bestowed upon the improvement of laboratory methods. In geology much time is devoted to field excursions, in which the student is taught to observe the work done in the great laboratory of nature.

It is the aim to bring into the class-room the results of the most recent discoveries and the most progressive thinking. In several of the departments

there are frequent meetings of the instructors and advanced students for the discussion of articles in the scientific journals giving the results of the most recent research.

While not forgetting nor neglecting the duties of the teacher, the scientific instructors aim to be investigators. Several of them have been engaged in important researches under the auspices of some of the scientific bureaus of the government. Some of the investigations carried on in the laboratories of Wesleyan University have won reputation in Europe, as well as in this country. Graduate, and in some cases undergraduate, students have had the opportunity of assisting in these investigations. The atmosphere of the institution is pervaded by the spirit of original investigation and independent thought.

The spirit of the scientific, as truly as that of the literary, departments, is the spirit of the college or university, not that of the professional or technological school. Science is taught, not as the basis of an art, trade, or profession, but as a means of mental discipline and of enlargement of the intellectual horizon. The aim is not to produce civil engineers, electricians, technical chemists, mining engineers, or physicians, but men capable of sympathy and active participation in the intellectual life of the age.

It is nevertheless true that a student intending to enter any of the scientific professions may in many cases considerably shorten the time otherwise required in the professional school by taking extended courses in science in college. The various professional and technological schools must teach the elements of the sciences on which the arts are based, to those students who have not elsewhere learned them. But those sciences may also be studied in the college. If the profession were the sole aim in life, those studies might be taken in the professional school, and the college course be omitted. But a larger intellectual life is the prize offered to him who takes the college course, with its study of science for science's own sake, and postpones the time when he shall submit to the narrowing influence of professionalism.

II. *THE HUMANITIES.*

BY PROF. L. O. KUHS.

It is not an easy task to group together and treat under one head all the departments not distinctively scientific. To give anything like an adequate conception of the aims and ideals of branches of learning so varied in interest and in methods of instruction, would require more or less elaborate statements from those in charge of the several departments.

It is believed that the facilities afforded by Wesleyan University for the successful pursuit of study in the departments of Ancient and Modern Languages, English Language and Literature, Philosophy, and the Historical and Social Sciences, are in every respect thoroughly in harmony with modern

scholarship. The expansion of the work done in the sciences is paralleled by a corresponding expansion in that group of studies which may be called the Humanities, and the last ten years have seen most of the departments which fall within the scope of this paper divided and placed under the charge of two or more instructors. To-day there are two professors of English, two professors and an assistant in Philosophy and Ethics, four professors or heads of departments in History, Economics, and the Modern Languages, while the Classics are taught by two professors, one associate professor and one instructor,—making a total of thirteen actually in charge of classes.



LIBRARY, CHAPEL, SOUTH COLLEGE AND NORTH COLLEGE.

The whole number of courses offered by these instructors is eighty-seven, ranging from elementary classes to those involving the work of original investigation. The system of electives in the last two years of the course enables the undergraduate to specialize to a large extent in any one department, if such is his desire. A glance over the catalogue will show the variety of courses which are at his disposal,—Roman Topography and Antiquities, Greek and Latin Epigraphy, Old and Middle High German, Old French, the Development of the English Drama, Literary Criticism, Anglo-Saxon and Gothic, advanced work in History and Social Science, and laboratory work in Physiological Psychology.

The aim of the instructors is to give a thorough grounding in the principles which lie at the base of the several branches of learning, and then to lead the student by means of personal direction and inspiration up toward the work of independent investigation.

While the discussion of seminary methods in college work belongs more properly to the subject of Graduate Instruction, which is treated elsewhere, yet it may not be out of place here to state that in many of the courses offered to undergraduates these methods are used. The department of English Literature in Wesleyan University has been a pioneer in this matter, having introduced twenty-three years ago the custom of supplanting the old-fashioned textbook by bringing the student into direct contact with the great masters of literature.

Of course the methods of instruction differ in the various departments, but in general they consist of recitations, collateral readings, courses of lectures given by the professor, illustrated occasionally by means of photographs or lantern slides, special lines of investigation done by the student under the direction of the instructor, the results of which must be given in the form of a lecture or paper to the class, and meetings of journal clubs to discuss technical periodical literature. In addition to this a number of the professors invite to their houses from time to time the members of their advanced classes for more informal readings and discussions of subjects connected with their departments. In the departments of Modern Languages the advanced classes are carried on in French and German.

What laboratories and material equipment are to science, books are to the other departments. It is a cause of sincere rejoicing to the friends of the college that a beginning has been made to increase the Library Fund to a sum fairly adequate to our needs. In addition to the amounts subscribed last Commencement for this purpose, over three thousand dollars will be spent during the present year for books. Very important, also, for the student in the advanced classes are the private libraries of the instructors. One of these libraries contains in the neighborhood of three thousand carefully selected volumes, two others have each over two thousand, while still others have between one and two thousand. All these are at the disposal of the students, and in this way, in addition to the forty or more thousand books in the college library, they have access to the main authorities in the various departments.

The personal element in college and university teaching cannot be overestimated. If it is true that while scholarship is of great importance, character is still more so, then those institutions where the student is brought into direct personal contact with men whose training and life work tend to develop the highest character, offer especial advantages to young men in the receptive stage of their development. The professors in Wesleyan University are all trained specialists, yet firm believers in a liberal education. It is believed that the work done is broad-minded, and that accurate scholarship and original investigation are accompanied by a spirit of true culture.

GRADUATE INSTRUCTION.

BY PROF. W. E. MEAD.

In most American colleges, graduate instruction is a comparatively late feature of the curriculum. Wesleyan holds an honorable place among those institutions which early made provision for advanced work after the completion of the undergraduate course. In the catalogue for 1873-74 we read: "Extended instruction will be given to those who wish to pursue post-graduate courses of study in any of the departments." The names of two graduate students appear in the same catalogue.



NORTH COLLEGE.

In the earlier years of the development of graduate instruction, some of the courses were tentative and were not infrequently created to meet the needs of individual students. The work at that time done by those students who remained for a year of quiet reading and study in a chosen department was doubtless of value in broadening and deepening researches begun in the undergraduate course; yet it became evident after a time that there was need of placing the system upon a more satisfactory basis.

As to the character of graduate work, the opinion became general that it should emphasize investigation rather than mere assimilation, and that it should

train the student in habits of independent research. No marked advance, however, in the character of the work is indicated in the catalogue announcements till 1889-90, when the old statement, which had remained substantially unchanged since 1874, was enlarged by the further announcement that information concerning graduate courses would also be found in the reports by the several departments on courses of instruction, and in connection with the conditions for the degrees of Master of Arts and Master of Science. It is to be noted, however, that up to the present year, neither in the catalogue nor in the pamphlet on courses of instruction, will be found an adequate account of the courses open to graduate students. At present not less than thirteen of the sixteen departments offer instruction for graduates. A part of the courses are open to the most advanced undergraduates, but a considerable number are for graduates only. In most cases a graduate student can arrange for a course suited to his special needs.

A detailed statement of courses cannot be given here, but merely some general indications of the facilities now afforded. Eighteen courses are offered by the departments of Chemistry, Physics, Biology, Geology, Mathematics, and Astronomy. Special investigations in the laboratories are planned and supervised by the heads of the departments concerned. The extent of the scientific equipment may be seen by reference to the sketch of the departments of Science.

No less extensive is the range of studies open to graduate students in the departments of Literature, Language, History, Philosophy, Economics, and Social Science. Twenty tabulated courses are already offered, and modifications of these courses can be made in special cases.

After this review of the history and present status of graduate instruction at Wesleyan, we may confidently maintain that the development of the college in the direction of true university work has been so gradual and conservative that the tentative stage has been passed and the period of marked advancement has begun. In the five years ending in 1895 seventy students, representing eleven different institutions and fifteen departments of college work, pursued graduate studies at Wesleyan. In the past twenty-three years one hundred and thirty-two graduate students have been registered. Of these Wesleyan has furnished one hundred and one, while sixteen other institutions have contributed the other thirty-one. This number will doubtless be steadily increased in the near future, and will thus keep pace with the recent enlargement of the ranks of the faculty, the multiplication of new courses, the increase of material equipment, and the growth of the body of undergraduate students.

THE LIBRARY.

BY W. J. JAMES, LIBRARIAN.

A marked feature in the educational work of the present day is the advanced position occupied by the university library in its relations to instructors and students. It is no longer, for the student, principally a source of intellectual

diversion, of more or less interest to the few who have a liking for books. It is recognized as essential for the largest results in independent scholarship. It guides, modifies, and enriches the labor of the student. The university library is not simply a storehouse of knowledge, but is more distinctively the study and the work-shop of both instructors and students, an absolutely essential instrument in all true university instruction.



INTERIOR OF THE LIBRARY.

With this new spirit Wesleyan University is heartily in sympathy. The multiplication of elective courses and the substitution of new methods of instruction for the old-fashioned system of text-book recitations, have made the library at Wesleyan an important factor in the intellectual activity of the college,

and the students of to-day obtain a very valuable part of their training within its walls.

To meet these new conditions properly it is necessary to have a library of carefully selected books, and also to have it administered in a liberal spirit, so as to encourage the use of its privileges. The administration of the Wesleyan library is carried on with this end constantly in view. The library building is open seven hours each week day for the purpose of enabling students to devote considerable time to work among the books. Each student receives some instruction in the arrangement of the library and ways of using it.

There is no one thing so stimulating to a student as to look at and handle the books in any department in which he is working. A few books constantly within his reach are more valuable to him than hundreds of volumes that he must ask for one by one. This important privilege of free access to the shelves is granted to all persons using the library.

In addition to the use of the books in the building, each student is allowed to take out, for home use, a reasonable number of volumes.

The regulations governing the use of the library are designed to encourage the freest possible employment of its privileges, consistent with the prevention of abuse and the protection of the equal rights of all.

To meet the demands made upon it, the library has a collection of 45,000 volumes carefully chosen to meet the needs of the various departments. Regular additions are made from the income of the endowment fund and from special gifts. A considerable number of the leading newspapers, magazines, and reviews are on file in the reading-rooms.

At the meeting of the Alumni Association in June, 1895, a subscription of \$2,500, commenced the preceding year, was completed. This money is now being spent in the purchase of books. At the same time, the sum of \$6,000 was pledged to the endowment fund, and a committee was appointed to secure additional subscriptions. It is the intention of the committee to increase the endowment fund of the library to at least \$50,000. The enthusiasm with which the Alumni Association greeted this movement is the best guarantee of its success, and is a most encouraging sign of the interest felt in the library by the graduates and friends of Wesleyan.

THE GYMNASIUM.

BY C. S. ALDRICH, DIRECTOR.

The erection of the Fayerweather Gymnasium, which was dedicated October 5th, 1894, gives to the students of Wesleyan University opportunities for physical training and development such as are enjoyed in few other institutions. In proportion to the number of men it is required to accommodate, this gymnasium is larger and better equipped than any other college gymnasium in New England. In addition to the large main hall, which is well supplied with gymnastic apparatus, there are rooms for boxing and hand-ball, bowling alleys, a

batting cage, running track, large and well-ventilated locker rooms, and the best of bathing facilities.

Every man who enters college is measured and examined by the Physical Director. Upon the basis of this examination a prescription of exercise is given to each student, calculated to remedy his individual defects. Those who are physically unable to engage safely in the more violent sports are cautioned, and a safe course of out-of-door exercise is suggested to them. The majority of students, however, are encouraged to take some part in the various athletic sports common in college life. From December 1st to April 1st, work is required



THE FAYERWEATHER GYMNASIUM.

of the two lower classes for three hours each week. Twenty minutes of each hour are spent in a class exercise in which a series of movements is memorized and executed to music, the Sophomores using single sticks in a broad-sword drill and the Freshmen Indian clubs. The aim here is to secure precision and accuracy of movement and to perfect muscular control. For the next twenty minutes the class is divided into squads of from ten to twelve men each. Each squad works under the direction of a leader upon some piece of apparatus, changing daily from one to another. By this plan tumbling, wrestling, hurdling, high and long diving, work upon the horizontal bar, parallel bars, flying

rings and vaulting horse is taught to every man in college, and some considerable proficiency in this wide variety of gymnastic exercise acquired by all. The apparatus work has been found to add a stimulus to other less attractive forms of exercises and is believed to have a valuable influence in a certain kind of mental training. The last twenty minutes of each hour are devoted to optional individual work.

On the three days of the week when required work is not scheduled, there are elective classes for the especial accommodation of the upper class men, open, however, to all members of the college. Here the wand and dumb-bell are substituted for the single stick and Indian club, but the general plan for the hour is the same as for the required work.

In addition to the regular class work described above, there is daily a large amount of gymnastic activity connected with the various college athletic organizations. The batting cage has proved a great benefit to the baseball team. The candidates for the track athletic team are given a systematic course of training throughout the winter months preparatory to the more severe work out of doors in the spring. Games of various kinds are also encouraged, and an effort is made to make the gymnasium not merely a school for muscular development, but rather a place of recreation in which both mind and body are refreshed and strengthened by judicious physical exercise.

The ideal which is constantly kept in view in the Fayerweather gymnasium is not the development of specialists in gymnastics or the training of any one to feats of extraordinary athletic powers. It is rather to give all the students of Wesleyan University, while in college, that general exercise which is necessary to favorable conditions for intellectual growth, and also to equip every graduate with that physical vigor and nervous strength, without which no man can long survive the nervous strain of active life under modern conditions.

EXPENSES AT WESLEYAN.

BY W. H. BURGWIN, '96, EDITOR OF "THE ARGUS."

A young man preparing for college naturally casts about that he may select wisely. One of the first questions to present itself, be he rich or poor—or neither of these two—is, "How about expenses?" At Wesleyan students find themselves in a peculiarly fortunate condition in this respect.

A canvass made two years ago by *The Argus* developed the fact, that for the preceding year the largest sum expended by any one man was \$1,100, and that the smallest amount expended was \$165. From a personal experience, I venture the assertion that a man who is, to a large extent, dependent upon himself, may safely figure that \$350 a year will be a fair allowance, and that this will cover all necessary expenses, including the cost of books, clothes, traveling, fraternity expenses and college bills. The fact remains that a considerable number of men hold a good position in college and spend even less than \$350; on the other

hand, a man in an easier financial condition will be able to make good use of a considerably larger sum, as his tastes and circumstances permit.

There are men at Wesleyan, who, during their college course, earn all, or a large part of their expenses. Many are employed during the summer vacations in various ways, canvassing, clerking, and otherwise. During the college year some are agents for men's furnishing goods, or laundries; some handle athletic goods and stationery; some find employment at the stores in town; others correspond for town papers, as well as for the dailies of the larger cities, New York, Boston, Philadelphia, Springfield, Hartford, etc. Some men find time for tutoring; others, musically endowed, are employed in the church choirs of the vicinity. Men studying for the ministry find an abundant opportunity for exercising their talent, and in New England the laborer is considered worthy of his hire. Several men find help in positions at the disposal of the college, and at the fraternity chapter houses more than a dozen men are employed as stewards and janitors. The few capture college prizes.

In addition to these "ways and means," the college has funds at its disposal which are wisely distributed among the worthy. The beauty of it all is, the men who do this work and receive this aid are not ostracized; in many instances they are the prominent men in college, both in scholarship and in popularity. A man may be janitor at his fraternity house, and at the same time be president of his class and its leader in scholarship. Therefore, to the poorer men who go to college, Wesleyan offers superior advantages.

On the other hand, a young man of larger means will find here facilities for a somewhat more liberal style of living. One matter will illustrate. There are rooms in the college dormitories and near the campus which are rented at reasonable rates, and the student may furnish them as he pleases, plainly or elegantly. It is well known, moreover, that Wesleyan has one of the finest groups of fraternity chapter houses in New England. In these chapter houses are suites of rooms, often elegantly furnished, which afford all the advantages of well-to-do homes, and are rented by the fraternities to such of their members as desire them. The same principle applies to other matters of expense.

There are at Wesleyan men of wealth, and men without wealth, and it can be truthfully said that any man with average ability need not hesitate in a desire to obtain a college education, provided only that he be willing to help himself. The opportunities are offered him at Wesleyan.

SOCIAL LIFE AT WESLEYAN.

BY FERRISS GREENSLET, '97.

Probably every man who is ready to enter college has been told many times that he will get more education from contact and intercourse with his fellows, than from text-books and lectures. Whether he believes it at the time or not, the chances are ninety-nine to one that he will believe it most heartily before the end of his sophomore year. And it is on this side of education that the

small college in general and Wesleyan in particular has many advantages. We at Wesleyan do not feel lost in the crowd. That doesn't mean that the puddle is so small that every man may be a big toad, but it does mean that there is not such an undue amount of competition that there is no recognition of really good men. Practically every man in college knows every other man. In conversation with a friend at one of the large universities, it appeared that while he has the greater number of speaking acquaintances, I have the greater number of acquaintances that deserve the title of friends.

The social life at Wesleyan is chiefly centered around the fraternities. The fraternity system has here reached a very high degree of development. There are seven fraternities represented at Wesleyan, each possessing a house that will compare favorably with the finest private houses in the city, or with college club-houses anywhere. As each of these chapters has a membership of from twenty-five to forty, it will be seen that a majority of the men in college are thus housed for the four years of their course. And can any more delightful environment for a man's college life be imagined, than a fraternity house occupied by thirty good fellows of congenial tastes and dispositions? Another fact must here be mentioned. The members of each chapter board at their club houses. From a social standpoint, this is a manifest improvement over both the "commons" and "eating club" systems prevailing at most of the other New England colleges. But are your friends confined to your own fraternity? Most decidedly: No! The class societies, of which there are two in each class, bring together the choicest spirits from all fraternities. Moreover, the Glee Club, the Mandolin Club, and the Athletic Organizations, together with the editorial boards of the *Argus*, the *Lit.*, and the *Olla Pod.*, bring together congenial men, irrespective of fraternity or class. In all social functions at Wesleyan you will see a certain *esprit de corps*, which shows how intimate and various are the ties which bind Wesleyan men to one another.

In addition, Middletown—one of the oldest and most beautiful towns in New England—is an ideal college town, not so large that the college is an unimportant factor in its social life, nor so small that the college is a controlling factor.

The townspeople are on very good terms with the college, and Wesleyan men are welcome in many of the pleasantest homes in the city, prominent among them being the homes of the faculty.

In fine, the key-note of social life at Wesleyan is rational recreation.

RELIGIOUS LIFE AT WESLEYAN.

BY H. D. TRINKAUS, '96, PRESIDENT OF THE Y. M. C. A.

In the busy routine of college life every man ought to embrace the opportunities for religious culture. Such opportunities are found at Wesleyan. The Young Men's Christian Association has the general oversight of the religious work of the college. This association is manned with a corps of five officers, one of the number being a generalissimo, and thirty-six aids-de-camp, or committeemen,

while the entire membership belongs to the force which is battling against evil in all its forms and for the advancement of the interests of religion in the community. These five officers—President, Vice-President, Corresponding Secretary, Recording Secretary, and Treasurer—together constitute the executive committee, whose duty it is to have general management of the affairs of the association. The committees are: Membership, Religious Meetings, Bible Study, Missionary, Neighborhood Work, White Cross, Intercollegiate, Finance, Building, and Publication.



HIGH STREET, OPPOSITE THE CAMPUS.

Every spring a Y. M. C. A. handbook is published and given gratuitously to the students. This neat little book contains much valuable information relating to the college life at Wesleyan, besides a "cut" book, memoranda and cash account.

The association has no building of its own, but expects to have one in the near future, one which shall be a credit to the college. Plans are maturing at the present time for this object.

Every day is begun with a prayer service in Memorial Chapel. Class prayer meetings are held every Wednesday from 7:00 to 8:00 P. M., each college class meeting separately. On Sabbath morning after regular chapel prayers, a general prayer meeting is held which is attended by students of all

the classes, members of the faculty, and people from the neighborhood. This meeting is led by members of the faculty, pastors in the city, and the students. All of these services have been characterized by a spirit of devotion, spontaneity and religious fervor.

Although there is no regular course of instruction in the English Bible in the curriculum at the present time, it is hoped by the students that there will be very soon. However, ample opportunity is found for systematic Bible study. Professors Rice and Winchester conduct separate classes which are largely attended by the students. A number of Bible classes are also conducted by the students who have been at the World's Student Conference, at Northfield, where special training for this work is received.

All these means of religious training are supplemented by private talks with some of the members of the faculty, and by informal meetings which the students hold voluntarily in their own rooms. There certainly is, for anyone who desires it, a broad opportunity for religious culture at Wesleyan.

ATHLETICS AT WESLEYAN.

BY C. R. BERRIEN, '96, BASEBALL MANAGER.

When you begin to talk upon athletics you invade the realm of the college-man's most pleasing and vivid memories. The glorious victories of his teams are things he never forgets. In fact, it would not be too much to say that two-thirds of undergraduate emotion, interest and attention is aroused by or devoted to the athletics of his *Alma Mater*. The enthusiasm of his college days becomes properly tempered in the alumnus, but it is always smoldering. Perhaps we give athletics too much prominence; but it is the fault of the age. The end of the century is an era of rampant athleticism. But these contests play their part in making sturdy citizens, and in training men in the invaluable qualities of loyalty, self-sacrifice, obedience, and temperance.

This "rampant athleticism"—if it may be so termed—runs through the last quarter of the century. In or about 1875 football and baseball began to be scientific. Wesleyan has been identified from the start with the popular movement and all branches of athletics have been supported here.

Rowing was general among the colleges fifteen years ago, and in the Saratoga, Lake George, and Springfield regattas, Wesleyan at different times distanced every rival. But the boathouse was washed away, the shells, trophy flags and cups were stored, and football was played on the plateau of Waltoona.

In 1884 our team defeated Harvard in football, and in the next year Wesleyan was admitted to the Intercollegiate Association, and retained her membership with honor until the association was practically disbanded in 1893. In the course of Wesleyan's football career she has scored against every college in the East at all prominent in the game, and defeated every one at different times, barring Yale and Princeton.

Our record in baseball is not so extended; but it is brilliant. For the last four years we have been well up with the leaders; and last year we ranked seventh among the colleges and were credited with having the best batting team. The list of victories included Yale, Brown, Georgetown and Holy Cross.

In track athletics we are still growing. But Wesleyan has won and defended her right to membership in the New England and in the American Intercollegiate Associations, in both of which she has held recent records.

Tennis and gymnastics flourish at Wesleyan; but in neither of these have we engaged in competition with other colleges, though efforts are being made towards that end. The new Gymnasium, which is a gem and compares more than favorably with those of other colleges, is doing an impersonal but effective work in raising Wesleyan's athletic standard.

It is not necessary to disparage the athletics of other colleges to glorify ours. Such a record as we have is of itself an occasion for pride,—amateur athletics, gentlemanly, self-respecting, plucky, neither too much elated by victory nor cast down by defeat. In all these qualities Wesleyan has excelled, and she is rightfully proud of her sons whom she sends out to be citizens in the Republic.

The following letters to the editors from prominent alumni may not improperly be printed here, as giving an estimate, by representative scholars who have had especial opportunities to observe it, of the work now done in the University. Rev. Dr. Kelley was last year a member of the annual visiting committee appointed by the trustees. The official position of Dr. Goode has made him acquainted with the work of scientific research done by officers and advanced students here under the auspices of government bureaus.

FROM REV. W. V. KELLEY, D. D.,
Editor of the Methodist Review.

Several successive days spent last winter at Wesleyan University in attendance, from early morning until evening, upon lectures, recitations and other exercises in the various departments, for the express purpose of ascertaining the extent and character of the work done there, enable me to feel that I personally know of a certainty whereof I here and now affirm; and I have ever since this visit of inspection desired an opportunity to write somewhere a brief statement, as critically careful and correct as possible, of the impressions then received. Having been led by specific reasons to give particular attention to the work done by instructors and students in the departments of literature, language, history, and philosophy, I will speak especially of them.

I was greatly impressed and continually delighted by what I saw of the range of study, the scholarly instruction, the thoroughly modern up-to-date methods, the skill of instructors and the enthusiasm of students. I do not hesitate to record my opinion that facilities unsurpassed in quality and value are afforded

the students in attendance at Wesleyan. Indeed, I know no reason for supposing, and can hardly imagine, that better work is done in any college. For the purpose of the most helpful and thorough instruction, for intellectual stimulation, as well as for other important effects, the close and friendly relations between faculty and students at Wesleyan, the immediate and constant accessibility of instructors and the directness of their personal contact and influence upon those whom they teach, furnish manifold advantages which are manifestly impossible in very large institutions.

FROM G. BROWN GOODE, LL. D.,

Assistant Secretary of the Smithsonian Institution; Director of the National Museum.

I cannot realize that twenty-five years have gone by since I finished my studies at Middletown, and that the instructors and students are nearly three times as numerous now as then. I have observed with great interest and pleasure the rapid progress which has been made, especially during the last fifteen years, and the manner in which the college is keeping abreast with the most advanced ideas in the matter of instruction, especially in post-graduate work. In 1870 there were no inducements for men to pursue post-graduate studies. Now in many departments the opportunities for professional scientific training and for research seem to me to be equal to those offered anywhere else in the United States. I see by the catalogue that a goodly number of graduates, not only of Wesleyan but of older and more wealthy institutions in the United States, are resorting to Middletown for special work; and the fact that from thirty to forty Middletown men, most of whom began their higher studies at their *Alma Mater* after graduation, are now candidates for degrees in the universities of Europe, is good evidence of the thorough character of the graduate work at Wesleyan and of the manner in which aspirations towards scholarship of the highest type are encouraged. Still more gratifying is it to know that the best graduate work of the college is accepted in Europe, and that the degree of Ph. D. has in several instances been given to Wesleyan men at the German universities after a residence of a year or eighteen months.

I am quite convinced that a college of moderate size, remote from the bustle of a great city, is the best place for advanced work, especially in the sciences. I have been pleased to notice in the scientific journals of the last few years so many evidences of productive activity on the part of instructors and graduate students of the University, especially in the fields of organic chemistry and bacteriology.

Wesleyan University has already men, libraries and laboratories well equipped for progressive work in instruction and research in certain special fields. I see no reason why an expenditure of money not overwhelmingly great in the aggregate may not keep these on a fair footing with their rivals elsewhere. No one can doubt that every discovery, every completed research, and every success in literature achieved by a member of the University is an inspiration to all of his colleagues and to every student.

—THE—

Wesleyan University Bulletin.

MIDDLETOWN, CONN.

MAY, 1896.—No. 18.

LEAVE of absence for the next collegiate year has been granted to President Raymond. He will improve the opportunity to secure a much needed rest, and to study the systems of education in England, France, and Germany. In the absence of President Raymond the administration of the College will be in charge of Vice-President Van Vleck.

The steady growth of the College, both in faculty and in students, during the seven years of President Raymond's administration may be best illustrated by the following table:

	'89-'90	'90-'91	'91-'92	'92-'93	'93-'94	'94-'95	'95-'96
No. of Faculty, - -	23	26	27	29	31	32	34
No. of Students, - -	230	250	266	271	273	288	301

The increase in the facilities for study at Wesleyan in the past seven years may be seen from the fact that whereas 69 courses were offered to students in the catalogue of 1889-90, the number announced the present year is 125. Since 1889 the teaching force in many of the departments has been much strengthened. The department of Rhetoric and English Literature has been sub-divided into the two departments of English Literature and English Language, each of which is now in charge of a professor. History and Political Economy, formerly one department, has in the same way been sub-divided and put in charge of two men, each with the title of associate professor. Two years ago an assistant was for the first time appointed in the department of Philosophy. In 1889, there was one professor of Physics; there are now two. The same is true of the department of Chemistry. The number of assistants in various departments has increased in the past seven years from four to eight.

The attention of intending students is especially called to the changes made this year in the conditions under which certificates entitling students to admission to College are granted to preparatory schools. The details are given on another page.

The inadequate facilities for heating the College Chapel and the lecture rooms gave rise in former years to much just complaint. The grounds for criticism were almost entirely removed by the relaying of the steam pipes last summer, with the result of marked improvement in the general health of the College community.

The honor system of examinations, tentatively adopted three years ago, is still on trial. No members of the governing body of the College wish to return to the old system of surveillance; and yet more than one is convinced that the honor system has not been successful beyond all cavil. Constant and hearty coöperation on the part of the student body is required in order to raise the tone of moral responsibility to the point where the success of the system can be permanently assured. There is reason to believe that the great majority of students are firmly convinced of the value of the honor system as a training school in practical ethics. This indeed is evidenced by the stringent regulations recently adopted by the students themselves with regard to dishonesty in examinations. But there is still need of more strenuous effort to impress upon individual students the obligations accompanying freedom from annoying inspection.

The Library still continues to be the department of the College most in need of immediate development. The constant growth of the intellectual life and the fostering of the spirit of investigation are in these days of laboratory methods in history, economics, literature, language, and philosophy, directly dependent upon the facilities afforded by a library of reference.

In seven years the number of courses offered to students has increased from 69 to 125. Yet the Library has in no sense kept pace with the advance in every other department. The sum of \$2,500 subscribed last year for the immediate purchase of books has been of the utmost value as far as it has gone. But the amount appropriated to each department is only a fraction of what is needed. More than \$2,500 could be profitably expended at once by each department. In view of these facts, to say nothing of the advances recently made by other Eastern colleges toward securing increased library facilities, it is evident that a more vigorous effort must be made by the friends of Wesleyan to bring up the library endowment to \$50,000 or \$100,000.

RECENT ACTIONS OF THE FACULTY.

CERTIFICATES.—By a recent vote of the Faculty a material change has been effected in the method of accepting pupils on certificate from preparatory schools. Hitherto, certificates have not been received in the departments of science and modern languages, and supplementary examinations in Latin and Greek have been required of all candidates, with a view to testing their ability to read at sight in these languages. Hereafter the privilege of certification may be granted in any or all departments of preparatory work, and the certificate may cover all the requirements in any department. The privilege in any department will be subject to revocation at any time; and all students admitted on certificate will be on probation until the completion of the mid-year examinations. The new system involves a more careful investigation than has previously been made into the work of each school applying for the certificate privilege, and it will result in materially decreasing the list of schools from which certificates, supplemented by examinations, have up to this time been accepted.

AWARD OF HONORS.—The Faculty has recently made important changes in the regulations concerning the award of honors. A detailed explanation of the new arrangement will be made officially in the revised edition of the Regulations, which will be issued in a few weeks; it will suffice here to call attention to a few matters of general interest. There will be, as heretofore, both "preliminary" and "final" honors, and the latter will be either "general" or "special." Special honors in any department will be hereafter of two grades, instead of one. A new method will be employed in computing honors, so that it will no longer be necessary to reckon the numerical standings of students at the end of each year. The attainment of honors, both general and special, will depend upon the candidate's receiving a certain grade in the work of a certain number of hours, and not falling below a certain other grade in the work of another number of hours. This system is another step in the direction of the removal of the old competitive marking system.

APPOINTMENTS TO THE FACULTY.

Edward Burr Van Vleck, appointed Associate Professor of Mathematics, is a graduate of Wesleyan in the class of 1884. In 1884-85 he was assistant in practical physics at Wesleyan; 1885-87, student in Johns Hopkins University, being Fellow in Physics for the year 1886-87. From 1887 to 1890 he was Tutor in Mathematics at Wesleyan.

For five semesters, 1890-93, he was a student of Mathematics in the University of Göttingen, where he received in 1893 the degree of Ph. D. During the two years subsequent to his return he was Instructor in Mathematics in the University of Wisconsin. His thesis, "*Zur Kettenbruchentwicklung hyperelliptischer und ähnlicher Integrale*," appeared in the American Journal of Mathematics in 1894.

James Morton Paton, appointed Instructor in Greek, was graduated from New York University in 1883 with the degree of B. A., and from Harvard with the same degree in 1884. He remained as a graduate student at Harvard from 1884 to 1887, when he was appointed Professor of Latin and French in Middlebury College. This position he held till 1891. From 1891 to 1894 he studied in Europe, 1891-92 at Bonn University, 1892-93 at the American School of Classical Studies at Athens, and 1893-94 again at Bonn, where he received the degree of Ph. D. Dr. Paton has published: *Introductions to "Chiswick Edition" of the Iliad and Odyssey*: New York, 1888. *De Cultu Dioscurorum apud Graecos, Pars I.*: Bonn, 1894. *Some Spartan Families under the Empire*, in *Trans. Amer. Philol. Assoc.*, Vol. 26, 1895.

TRUSTEE MEETING.

An adjourned meeting of the Board of Trustees of Wesleyan University was held in New York City, March 23, 1896.

The Board authorized the employment of Charles Hubbard Judd, Ph. D., as an assistant in the department of Philosophy.

President Raymond was granted leave of absence for next year.

A communication from the College Athletic Association, relating to the subject of a field for athletic sports, was referred to the Executive Committee for consideration, with instructions to report at the next annual meeting.

RECENT GIFTS.

William Hoyt, Esq., has given \$10,000 to the general endowment fund.

Rev. A. S. Hunt, D. D., '51, has given \$200 towards the current expenses of this year.

Fifty dollars has been given by Hiram Merritt, Esq., for physical apparatus.

MIDDLETOWN SCIENTIFIC ASSOCIATION.

The following subjects have been discussed at the meetings of the Association since the last report in the BULLETIN:

June 11, 1895.—Diamonds, Natural and Artificial; W. P. Bradley. The Evolution of the Electric Motor; E. B. Rosa.

Oct. 8.—*Bacillus* 41; H. W. Conn.

Dec. 10.—The Seals and the Seal Islands; Prof. T. C. Mendenhall, President of the Worcester Polytechnic Institute.

Jan. 14, 1896.—The Glossopteris Flora, or Evidence as to former land connection between the southern continents, Australia, Africa, and South America; W. N. Rice. Louis Pasteur; H. W. Conn.

Feb. 14.—Some apparent suspensions of the law of the Conservation of Energy, and of Chemical Affinity; W. P. Bradley. The Gold Reserve and the Bond Sales; W. C. Fisher.

March 11.—The Zoölogical Station at Naples; E. L. Rice. The Relation of Tuberculosis in Animals to the Public Health; H. W. Conn.

April 21.—The History of the Discovery of Helium; J. M. Van Vleck. Future Geological Possibilities, and their effect on the life of the earth; S. W. Loper.

JUNIOR EXHIBITION.

The annual Junior Exhibition was held in the College Chapel on the evening of Thursday, April 23d. The committee of award were the Hon. Silas A. Robinson, the Rev. Raymond Maplesden, and Mr. C. S. Aldrich. The first prize was awarded to Leon K. Willman, of Pottstown, Pa., for an oration on "The Majesty of the Law." The second prize was won by Miss Lizzie E. Dufford, of Paterson, N. J., who presented "A Plea for the Irish."

THE LIBRARY.

The committee appointed last June to secure additional subscriptions to the Library Endowment Fund has received some important subscriptions and is encouraged to expect more, but is not prepared as yet to present a definite report.

There have been presented to the Library from May 1st, 1895, to April 30th, 1896, 663 bound volumes and 2,827 pamphlets. The principal donors were the United States Government, A. C. Bruner, G. W. Graham, Hon. J. P. Pigott, Hon. O. H. Platt, Hon. N. D. Sperry, and Hon. W. F. Willcox.

The Librarian desires to renew his request that graduates and friends of the College who have books and pamphlets which they are ready to part with, will give him an opportunity to judge of the usefulness of such books and pamphlets to the Library. The Library needs most of the historical publications issued by the New England States. Possibly some of the alumni may be able to contribute some of these volumes.

During the past year \$31 has been received from the treasurer of the class of '94 as a contribution to the '94 fund for the purchase of books on political economy.

The bound volumes of newspapers and most of the United States Government publications have been shelved on the third floor. The public documents have now become available for the first time in years.

At the beginning of the college year the Freshman class was divided into small sections, and each section was given an hour's instruction in the use of the Library. This instruction was general in character, and was not meant to take the place of the personal assistance given freely to every student needing it.

THE MUSEUM.

During the last year a collection of Triassic fossils from the vicinity of Miletown, and of fossils from Cañon City, Col., was sent to the Paleontological Museum of Munich. In exchange for these, Professor von Zittel has sent a beautiful collection of European fossils, including a large number of specimens—fishes, insects, etc.,—from the famous quarries of lithographic limestone in Solenhofen and vicinity. The Solenhofen specimens have been placed by themselves in a table case in the alcove where the Jurassic fossils are arranged, and constitute one of the most attractive features of the Museum.

The Curator of the Museum was occupied a part of the summer vacation in collecting Silurian fossils for the U. S. Geological Survey at Valcour Island, Lake Champlain. After fulfilling his engagement with the Survey, he remained at the same locality long enough to obtain a valuable collection of fossils for the college Museum.

The Professor of Geology participated, during the summer vacation, in an excursion of the Geological Society of America in western Massachusetts and northwestern Connecticut. He improved the opportunity to make a collection illustrating the metamorphic rocks of that region.

Some interesting tracks from the Portland quarries, including a remarkably fine track of *Otozoum Moodii*, have been obtained from Mr. Fred M. Stancliff.

A remarkable locality of tourmaline of various colors has been recently discovered at Haddam Neck, and a large number of specimens have been obtained, chiefly by purchase from Mr. M. P. Gillette. Associated with the tourmaline in the granite vein are lepidolite, albite, and other interesting minerals.

Contributions of money for the purchase of some of these specimens have been received from Rev. J. T. Pettee and Dr. O. S. Watrous.

DEPARTMENT NOTES.

ENGLISH LANGUAGE.—A course of weekly lectures on Anglo-Saxon literature will be given next year. This course will be open to Sophomores.

An advanced Anglo-Saxon course for Seniors will be given next year. The work will be based for the most part upon *Beowulf*.

HISTORY.—A new course in history is given this second half-year, designed to serve as a sequel to the course in Constitutional History. The work is conducted on the seminary plan, and has to do with the historical and critical study of forms of government under the modern Constitutional State. Each member of the class is assigned a topic for special investigation, and is required to sum up the results of his work in a written report to be read before the class.

PHILOSOPHY.—I. Besides the courses described in the Catalogue for 1895-96, Mr. Shaw has read Wundt's *Human and Animal Psychology* and Külpe's *Outlines of Psychology* with candidates for honors and with graduates. Professor Armstrong has given a brief graduate course in Green's *Introduction to Hume*.

2. The enlargement of the teaching force in the department will make possible in 1896-97 a considerable re-arrangement and development of the work.

In *psychology* two principal changes will be made. First, a course in experimental psychology will be introduced. The aim of this course will be to ground the student in the essentials of psychological experimentation; and he will be expected to acquaint himself alike with the principles and the chief results of the newer methods of inquiry. Second, Course VIII., Advanced Psychology, will become a definite part of the curriculum, but with some alterations in plan. Instead of a definite adherence to a single text-book, selected topics of present importance will be considered, with references to various authorities. In so far as any one work is used as a basis of discussion, it will be Wundt's *Outlines of Psychology*. Of these two courses the first will be conducted by Dr. Judd, the second by Dr. Judd in conference with Professor Armstrong.

In *philosophy*, Course IV. will be enlarged to three hours a week, first half-year. Two hours each week will be devoted to Advanced Logic under Dr. Judd, the third to Introduction to Philosophy with Professor Armstrong. Course X., Metaphysical Seminary, will also be increased to three hours per week (second half-year). The subject in 1896-97 will be the same as this year, Lotze's *Metaphysics*. In the first half-year a new course will be offered, open to graduate students only. The subject will be the Kantian philosophy; and the three great "Critiques,"—of Pure Reason, of Judgment, of Practical Reason—will be read entire, either in class or as collateral. The course will be conducted by Professor Armstrong, and will occupy two hours a week, counting as three or four hours.

3. Further changes are in contemplation which cannot yet be formally announced. It may be said, however, that larger opportunities will be afforded than heretofore for advanced work under the personal direction of the instructors. This will be true especially in psychology.

ETHICS AND EVIDENCES OF CHRISTIANITY.—A course of lectures is given this year by Professor Rice on the relations of Science and Religion. In this course a historical sketch is given of the development of the four characteristic ideas of modern science:—the extension of the universe in space, and the heliocentric arrangement of the planetary system; the antiquity of the earth and of man; the doctrine of evolution in astronomy, geology, and biology; the conservation of energy, and the dynamic unity of nature. The bearing of each of these ideas upon theological beliefs is shown, and the general status of Christian belief in relation to the tendencies of scientific thought is discussed. This course will be omitted next year, but will probably be given in alternate years hereafter.

PHYSICS.—As was announced a year ago, the work of the department is this year under the sole direction of Professor Rosa, Professor Crawford being in Europe on leave of absence.

Two important machines have been added to the equipment of the machine shop, a large engine lathe and a shaper. They are being paid for chiefly by the sale of scientific apparatus constructed in the shop for other institutions.

CHEMISTRY.—Dr. C. F. Langworthy has resigned the Instructorship in Chemistry and accepted a position in the Office of Experiment Stations of the U. S. Department of Agriculture in Washington. Dr. F. G. Benedict has been appointed in his place.

Food Investigations.—Previous numbers of the BULLETIN have referred to the studies in this direction which are being carried on by authority of the U. S. Department of Agriculture on plans which have been elaborated mainly at Wesleyan. The studies are primarily in the field of biological chemistry, but in their practical application they reach into the domains of statistics, economics, and sociology. They are being conducted in coöperation with a number of universities, colleges, experiment stations, college settlements and other philanthropic organizations, including Wesleyan. The General Assembly of Connecticut, at its last session, provided an annual appropriation of \$1,500 to be used by the Storrs Experiment Station for investigations of the economy of food and the bacteria of milk. The bacterial investigations are entrusted by the Station to Professor Conn, under whose direction they are carried out in the biological department, while the food investigations are prosecuted under the immediate direction of Professor Atwater, who is Director of the Station, and also has charge of the government food investigations just named.

Chemical Club.—A valuable feature of the chemical department is the chemical club which has been in successful operation for several years. This is an organization mainly of instructors, assistants, and graduate students, but undergraduates are also admitted to membership. The list of members for the present year includes ten graduates of this and other institutions who are connected with the work of instruction and research in chemistry at Wesleyan. The meetings are held weekly. The exercises include papers upon investigations in which the members are or have been engaged and abstracts of articles in chemical journals, American and foreign, are presented. At several of the meetings of each year members who have lately studied at other schools, in this country and in Europe, give interesting accounts of what they have seen and done. The early meetings of the current year were thus enlivened by papers from members who had lately received the doctorate from German universities. The exercises have constantly increased in interest and value since the organization of the society and of late have been especially valuable.

GEOLOGY.—Course II. in Geology is this year divided into two parts, each of which may be elected without the other. The first part includes structural and dynamical geology, the second includes historical geology and paleontology. The same arrangement will be made next year. Dana's Manual of Geology will probably be the text-book next year.

The course in Mineralogy, omitted this year, will be given next year, and probably in alternate years hereafter.

Contributions of money for the mineralogical apparatus recently purchased (in addition to those previously acknowledged) have been received from C. Lippitt, Esq., E. O. Fisk, Esq., Rev. J. W. Barnhart, and Miss E. J. Mead.

BIOLOGY—*Journal Club*.—In the winter term a biological journal club was organized. The meetings are held weekly and there are seven regular attendants. The subjects reviewed are mostly bacteriological, but other biological topics receive attention.

The department has been fortunate in securing for the last half of this year the services of Dr. E. L. Rice, who has recently returned from Munich, where he has taken the degree of Doctor of Philosophy. Dr. Rice has been appointed assistant in the department for the year and has been employed especially in the class in General Biology and Botany. His assistance has made it possible to introduce more practical work in this class and has very materially added to the value of the course.

The course in bacteriology will be omitted next year. In its place will probably be given Course VI., Evolution.

Summer School.—The summer school at Cold Spring Harbor will hold its session as usual. The courses begin July 6th and last for six weeks. The laboratory will be open till August 1st. Several Wesleyan students are planning to attend the school.

LECTURES AND PUBLICATIONS BY MEMBERS OF THE FACULTY.

PRESIDENT RAYMOND.—*Lectures*.—The Man and the Machine, an address on Connecticut Day at the Atlanta Exposition.

Abraham Lincoln. Russell Library Hall, Middletown.

College Education. Rhode Island State Teachers' Association, Providence, R. I.

Several addresses on Education at the various Annual Conferences during the month of April, 1896.

PROFESSOR RICE.—*Lectures*.—Evolution (4 lectures). University Extension Society, Meriden, Conn.

The Sandstones and Traps of the Connecticut Valley. University Extension Society, Meriden, Conn.

Volcanoes. University Extension Societies, Meriden and New Haven, Conn.

Bermuda. University Extension Societies, Waterbury and New Haven, Conn.

The Yellowstone National Park. University Extension Societies, Waterbury and New Haven, Conn.

The Essentials of a High School Curriculum. Connecticut Association of Classical and High School Teachers.

The Alternative: Christianity or Agnosticism. Young Men's Sunday Evening Association, United Church, New Haven.

The High School in relation to other Educational Institutions. Dedication of High School Building, Middletown, Conn.

The Epoch of Evolution. Anniversary of State Normal School, New Britain, Conn.; Boston Methodist Episcopal Preachers' Meeting.

Publication.—The President's Message. *Zion's Herald*, Jan. 8, 1896.

PROFESSOR ATWATER.—*Lectures.*—A course of four lectures on the Chemistry and Economy of Food, at the Epworth Assembly, Point o' Woods, Long Island, in July, 1895; the same at the Chautauqua Assembly, Chautauqua, N. Y., in August.

Food Economy and Investigations at Wesleyan. Poultney and Montpelier (Vt.) Academies, in January, 1896.

The Food of the Poor in its Sociological and Ethical Relations, before the New York M. E. Preachers' Association, in February, 1896.

Publications.—Methods and Results of Investigations of the Chemistry and Economy of Food, pp. 222. Bulletin No. 21 of the Office of Experiment Stations of the U. S. Department of Agriculture, Washington, D. C., 1895.

Food: Composition and Cost. Farmers' Bulletin No. 23 of the U. S. Department of Agriculture, pp. 22, Washington, D. C. Second and third editions, 1895 and 1896.

Report of Director of the Storrs Agricultural Experiment Station, 1895. *Annual Report of the Storrs Experiment Station, 1895.*

PROFESSOR CONN.—*Lectures.*—Recent Innovations in the Ripening of Cream. Maine State Board of Agriculture, Norway, Maine, Dec. 5, 1895. Published in the Annual Report.

What the Public has a right to demand of the Milk Producers. Connecticut State Board of Agriculture, New Haven, Conn., Dec. 18, 1895. The same lecture was also delivered before the New England Milk Producers' Union at Boston, on January 25, 1896; and was published in the Annual Report of the Connecticut Board.

The Hunter and the Hunted. Bridgeport Scientific Association.

Cream Ripening. State Dairymen's Association, Hartford, Conn., Jan. 22, 1896.

The Microscope in Bacteriology. The Brooklyn Institute, Feb. 12, 1896.

Bacteria as the Dairyman's Friends and Foes. National Ayrshire Association, Boston, Feb. 12, 1896.

Bacteria. Centenary Collegiate Institute, Hackettstown, N. J., March 12, 1896.

Publications.—Dairy Bacteriology, published by the U. S. Department of Agriculture as Bulletin No. 25 of the Office of Experiment Stations.

A Year's Experience with Bacillus 41 in General Dairying. *Annual Report of the Storrs Experiment Station, 1895.*

Bacteria as the Dairyman's Friends and Foes. *Annual Report of the Pennsylvania Agricultural Department*, 1895.

Theism and Science. *Christian Advocate*, March, 1896.

Several special articles upon Bacteria in Cream Ripening, in creamery and dairy journals.

PROFESSOR MERRILL.—*Lectures*.—The Home and School Life of Roman Boys. At the State Normal Training School, New Britain, Conn., Jan. 22, 1896.

The Choice of a Profession in Ancient Rome. At the same place, Feb. 19, 1896.

How a Roman Boy was Brought Up. Wesleyan Academy, Wilbraham, Mass., Feb. 27, 1896.

Publication.—The Codex Riccardianus of Pliny's Letters. *The American Journal of Philology*, Vol. XVI., pp. 468-490.

PROFESSOR ARMSTRONG.—*Lecture*.—Typical Eras in Skepticism, before the Yale Philosophical Club, March 30, 1896.

Publications.—Philosophy in the United States. *Educational Review*, June, 1895.

Transitional Eras in Thought. *The New World*, September, 1895.

The Return to Faith. *The Methodist Review*, January-February, 1896.

Reviews.—Hyslop's Elements of Ethics, *Educational Review*, June, 1895; Rehmke's Allgemeines Lehrbuch der Psychologie, *Science*, August 30, 1895; Ladd's Philosophy of Mind, *Educational Review*, September, 1895; Alaux's Théorie de l'Ame Humaine, *Philosophical Review*, May, 1896.

PROFESSOR MEAD.—*Publication*.—A Fortnight on an Icelandic Farm. *Methodist Review*, July-August, 1895.

PROFESSOR NICOLSON.—*Publication*.—The Plutus of Aristophanes, with notes in Greek. pp. v. + 123. Boston: Ginn & Co.

DR. PATON.—*Publication*.—Some Spartan Families under the Empire. *Transactions of the American Philological Association*, Vol. XXVI., 1895.

PROFESSOR E. B. VAN VLECK.—*Lecture*.—An Application of the Method of Conformal Representation to the Study of Related Differential Equations, before the American Mathematical Society at its annual meeting, Springfield, August 28, 1895.

PROFESSOR KUHN.—*Lectures*.—An address before the Pennsylvania German Society in Bethlehem, Penn., on the Pennsylvania German in Education. Oct. 15, 1895.

Lecture on the Divine Comedy. Bridgeport, Conn., Feb. 10, 1896.

Paper on Nature in the Divina Commedia, before Modern Language Association at New Haven, Dec. 27, 1895.

Lecture before the Epworth League of the Methodist Church in Middletown, on "Mediaeval Stories and Superstitions concerning Animal Life." April 2, 1896.

Publications.—Paper on some verbal resemblances between the Divine Comedy and the Orlando Furioso. *Modern Language Notes*, June, 1895.

Conventional Treatment of Nature in the Divina Commedia. *Modern Language Notes*, Jan., 1896.

The Divine Comedy. *Methodist Review*, March-April, 1896.

PROFESSOR ROSA.—*Publication.*—The Evolution of an Electric Motor. *The Chautauquan*, January, 1896.

PROFESSOR DENNIS.—*Lectures.*—Ancestor Worship in the Writing of History. Evelyn College, Princeton, N. J., Feb. 11, 1896.

Lord Baltimore's Struggle with the Jesuits, before the Maryland Historical Society, Baltimore, Md., May 11, 1896.

Lord Baltimore's Relations with the Jesuits, before the Historical Seminary of Johns Hopkins University, May 8, 1896.

Announcement was made in the BULLETIN for May, 1895, of the organization of a new literary club by certain members of the Faculty. During the past year the following papers have been presented before this organization:

1. The Return to Faith. Professor Armstrong.
2. Library Classification. W. J. James.
3. The Essential Element of Literature. Professor Winchester.
4. The History of Religious Toleration in Maryland and Rhode Island. Professor Dennis.
5. An Epicurean Inscription from Asia Minor. Dr. Paton.
6. The Life and Writings of Hans Sachs. Dr. A. W. James.

EMPLOYMENT FOR WESLEYAN STUDENTS.

A circular with the above heading was sent out last November to three thousand persons, including all the alumni of the College. It was intended to serve the double purpose of securing the registration of all graduates who desired to secure positions, especially as teachers, and of urging the friends and alumni of the College to send information to the office of the Bureau of vacant positions which might be filled by Wesleyan graduates. A considerable number of graduates, especially of recent years, have already registered, and information concerning their present circumstances and their wishes regarding future employment is now accessible in convenient form.

Besides securing positions for teachers the aim in organizing this Bureau was to provide opportunities for students to earn money towards paying their college expenses, by work in Middletown during term time, or in Middletown or elsewhere during the summer vacation. The list of those who have applied for employment under one of the above heads is already quite large. Unfortunately, this is the least promising department of the work, especially as regards

employment during term time. Middletown is too small a city to afford such opportunities as make a Bureau of this kind a success in a college near Boston or New York. It is hoped that something may be accomplished in securing positions for students in summer hotels. Letters have been sent to the managers of nearly two hundred of these, and though up to the present favorable answers have been received from only a few, there is ground for hope that after the season opens persistency in application will meet with some reward.

The most promising department of the work is that of securing positions for graduates as teachers. Already more calls for the nomination of candidates for positions have been received than can be satisfactorily answered, and it seems likely that such opportunities will increase in number for the next two months, when appointments are being made in nearly all schools for the next year. Letters have been sent to the principals of over three hundred schools, asking for information regarding probable vacancies on their staff, and begging the privilege of nominating candidates; and, as has been stated above, the result has been very satisfactory. It may fairly be said that enough has already been accomplished in this line of work to justify the establishment of the Bureau.

The invitation to register is once more extended to all who have not yet availed themselves of it; and the alumni and friends of the College are again urgently requested to inform the office of any vacancy coming to their notice which might be filled by a Wesleyan graduate. No fees are charged. Communications should be addressed to the Secretary of the Faculty.

RESPIRATION CALORIMETER.

Research upon nutrition has reached the point where the study of the application of the laws of the conservation of matter and of energy in the living organism are essential. That is to say, we must be able to determine the balance of income and outgo of the body, and this balance must be expressed in terms both of matter and of energy. Investigations in this general direction have been in operation for some years in European universities. The efforts toward the enterprise at Wesleyan have been made during the past eight or ten years. For this purpose a respiration calorimeter is being elaborated here. This is an apparatus in which an animal or a man may be placed for a number of hours or days, and the amounts and composition of the excreta, solid, liquid and gaseous; the potential energy of the materials taken into the body and given off from it; the quantity of heat radiated from the body; and the heat equivalent of the muscular work done, are all to be measured.

An important purpose of this investigation is to obtain light upon the question of the application of the laws of the conservation of energy in the organic world. With this object in view the human body is looked upon as a machine for converting the potential energy of food into work and heat. This particular inquiry has been carried on by Professors Atwater and Rosa, the calorimeter

having been devised by the latter. Four years have already been devoted to the development of the respiration calorimeter and it is at last in such shape as to give promise of the most interesting and valuable results.

During the past two years the enterprise has had the support of the U. S. Department of Agriculture which has made this inquiry a part of its food investigations. As is often the case in such inquiries it has been thought wise to say very little until definite results should be ready for publication.

RECENT COLLEGE APPOINTMENTS.

CLASS.

- 1875. Clarence Abiathar Waldo, Professor of Mathematics, Purdue University.
- 1880. Charles Dayton Woods, Professor of Agriculture, Maine State College.
- 1884. Albert Raddin Sweetser, Assistant in Botany, Harvard University.
- 1884. Edward Burr Van Vleck, Associate Professor of Mathematics, Wesleyan University.
- 1885. Frederick Shenstone Woods, Assistant Professor of Mathematics, Massachusetts Institute of Technology.
- 1886. Charles Warren Hawkins, Professor of Latin and Greek, Carleton College, Farmington, Mo.
- 1888. Harry Keiser Munroe, Instructor in English, Pennsylvania State College.
- 1889. William Emory Smyser, Professor of Rhetoric and English Literature, De Pauw University.
- 1890. Charles Manning Child, Assistant in Anatomy and Histology, Chicago University.
- 1890. Frank Burnett Dains, Assistant Professor of Chemistry, Northwestern University.
- 1890. Wendell Phillips Parker, Instructor in Physics, Olivet College, Olivet, Mich.
- 1891. Charles Wilfred Savage, Instructor in Chemistry and Physics, Carleton College, Northfield, Minn.
- 1892. Lincoln Robinson Gibbs, Instructor in English Literature, Boston University.
- 1892. Edward Loranus Rice, Assistant in Biology, Wesleyan University.
- 1893. Ashley Horace Thorndike, Instructor in Mathematics, Boston University.
- 1894. Edwin Bryant Nichols, Instructor in Modern Languages, Maine State College.
- 1895. Edward Francis Coffin, Assistant Secretary of Faculty, Wesleyan University.
- 1895. Ernest Ketcham Smith, Assistant Librarian, Wesleyan University.
- 1895. Merle Bowman Waltz, Fellow in Political Economy, Chicago University.

OBITUARY RECORD.

The following deaths among the Alumni have been reported since the publication of the last Obituary Record:

CLASS.

1838. John Wesley Pratt, b. 8 December, 1815, in Pratt's Hollow, Madison Co., N. Y.; d. 9 February, 1896, in Lansingville, N. Y.
1840. Ulysses Chapman, b. 31 March, 1808, in North Killingworth, Conn.; d. 7 December, 1895, in Benton City, Texas.
1840. Thomas Pickard, b. 21 October, 1819, in Fredericton, New Brunswick; d. 12 September, 1895, in Sackville, N. B.
1841. Gideon Palmer, b. 30 October, 1816, in Montville, Conn.; d. 6 March, 1894, in Jacksonville, Fla.
1842. Miles Tobey Granger, b. 12 August, 1817, in New Marlborough, Berkshire Co., Mass.; d. 21 October, 1895, in North Canaan, Conn.
1846. Francis Ward Hammond, b. 4 October, 1821, in New Village, N. Y.; d. 4 November, 1894, in Toano, James City Co., Va.
1846. Zenas Hurd, b. 27 October, 1821; d. 11 May, 1896, in Lima, N. Y.
1846. Lewis Fuller Jones, b. 5 August, 1821, in Petersburg, Rensselaer Co., N. Y.; d. December, 1895, in Mariposa, Cal.
1848. Charles Wesley Davenport, b. 16 August, 1826, in Washingtonville, N. Y.; d. 9 February, 1896, in Gibbon, Nebr.
1848. Daniel Farnum Pond, b. 14 July, 1822, in Mendon, Worcester Co., Mass.; d. 20 January, 1896, in New York, N. Y.
1851. Elliott Judson Peck, b. 22 May, 1822, in Stratford, Conn.; d. 5 March, 1893, in Stratford, Conn.
1855. John Howard Whiting, b. 6 December, 1834, in Painted Post, Steuben Co., N. Y.; d. 18 September, 1895, in Mt. Pleasant, Iowa.
1858. Charles Smith Rogers, b. 13 May, 1831, in Huntington, Suffolk Co., N. Y.; d. 16 July, 1894, in Dorchester, Mass.
1860. Charles Nelson Stowers, b. 24 September, 1835, in Prospect (now Stockton), Waldo Co., Me.; d. 2 March, 1896, in Hamline, Minn.
1860. George Clark Webber, b. 15 November, 1837, in Hallowell, Kennebec Co., Me.; d. 11 June, 1895, in Millbury, Mass.
1871. George Storrs Wentworth, b. 29 November, 1836, in Milton, Strafford Co., N. H.; d. 14 July, 1893, in Keene, N. H.
1890. Frederick Augustus Gascoigne, b. 8 July, 1861, in Brooklyn, N. Y.; d. 27 January, 1896, in New York, N. Y.
1890. Walter Everard Morse, b. 18 October, 1866, in Livermore Falls, Me.; d. 3 February, 1896, in Monson, Mass.
1892. August Kullman, b. 20 February, 1865, in the parish of Qvevlax, Finitland, Russia; d. 27 July, 1895, in Asansole, India.
1893. James Adelbert Leach, b. 9 February, 1871, in Bucksport, Me.; d. 23 November, 1895, in Hartford, Conn.

CALENDAR.



1896.

- June 4, Thursday, 7:30 P. M.,—Junior Prize Debate.
- June 19, Friday, 7:30 P. M.,—Freshman, Sophomore and Junior Declamation.
- June 21, Sunday, 10:30 A. M.,—Baccalaureate Sermon, Rev. Bradford Paul
Raymond, D. D., LL. D.
- June 21, Sunday, 7:30 P. M.,—University Sermon.
- June 22, Monday, 11 A. M.,—Public Awarding of Prizes.
- June 22, Monday, 2 P. M.,—Class Day Exercises.
- June 22, Monday, 8:00 P. M.,—Annual Meeting of Board of Trustees.
- June 22, Monday, 8:00 P. M.,—Glee Club Concert.
- June 23, Tuesday, 9:00 A. M.,—Meeting of the Φ . B. K. Fraternity.
- June 23, Tuesday, 10:00 A. M.,—Business Meeting of the Alumni Association.
- June 23, Tuesday,—Reunions of Classes of 1846, '71, '81, '86, '89, '93.
- June 23, Tuesday, afternoon,—Receptions by the College Fraternities.
- June 23, Tuesday, 8:00 P. M.,—Address before the Phi Beta Kappa Society
by Prof. John Williams White, Ph. D.
- June 24, Wednesday, 10:00 A. M.,—COMMENCEMENT.
- June 24, Wednesday, afternoon,—Commencement Dinner.
- June 24, Wednesday, evening,—President's Reception.
- June 25, Thursday, 9:00 A. M.,—Examination of candidates for admission
begins.
- Sept. 30, Wednesday, 9:00 A. M.,—Examination of candidates for admission
begins.
- Oct. 1, Thursday, 9:00 A. M.,—First Term begins.

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Wesleyan University Bulletin.

MIDDLETOWN, CONN.

NOVEMBER, 1896.—No. 19.

LEAVE of absence for the present collegiate year has been granted to President Raymond. He is improving the opportunity to secure a much needed rest, and to study the systems of education in England, France, and Germany. In the absence of President Raymond, the administration of the College is in charge of Vice-President Van Vleck.

The present college year is marked by a number of changes in the corps of instruction. The classes in Ethics and Evidences of Christianity are conducted in the absence of President Raymond by the Rev. H. A. Starks, D. D., Wesleyan, '69. In the department of History, Associate Professor Dennis, whose resignation was made necessary by illness, has been succeeded by Dr. Max Farrand, Princeton, '92. Dr. Eichelberger, for six years Instructor in Mathematics, has accepted a position in the United States Nautical Almanac Office at Washington. His successor is Dr. George H. Ling, Toronto University, '93. In the department of German, Dr. A. W. James, who has been appointed Associate Professor of German in Miami College, is succeeded by Dr. A. B. Faust, Johns Hopkins, '89. In the department of Philosophy, Dr. C. H. Judd, Wesleyan, '94, has been appointed Instructor, replacing Mr. Shaw. In the department of Chemistry, Dr. F. G. Benedict, Harvard, '93, succeeds Dr. Langworthy. In the Gymnasium, Mr. F. W. Marvel, Brown, '94, is successor to the retiring Director, Mr. Aldrich.

During the temporary absence of Associate Professor Nicolson, owing to ill-health, his classes in Latin are conducted by Mr. Arthur G. Leacock, Harvard, '93.

It is a matter of gratification that the number of students this year, as for every year since 1888, shows an increase. In the Catalogue for 1887-88, 190 students are reported. The number this year already reaches 306, and will not improbably be somewhat increased by the time when the Catalogue is ready for publication.

The needs of the Library still remain urgent. What these needs are can be fully realized only by those who attempt to use the Library for purposes of investigation in advanced work. The movement begun two years ago to increase the Library endowment has been somewhat hindered by the financial depression of the last few months, but there is good ground for hoping that with the return of general prosperity, the permanent endowment fund of \$50,000 will be speedily completed.

The attention of candidates for admission to the College is directed to the announcement of a recent increase in the requirements for admission to the Latin-Scientific and Scientific Courses. The details are given on a later page.

NOTES OF THE LAST COMMENCEMENT.

TRUSTEE MEETING.—The annual meeting of the Board of Trustees, in accordance with the change made in the By-Laws one year ago, was held on the evening of Monday, June 22, 1896, and was continued in three sessions on the following day. Thirty-two members were present.

Announcement was made of the reelection by the Newark Conference of the Rev. Edson W. Burr, D. D., as Trustee; also of the election by the Maine Conference of Rev. Charles W. Gallagher, D. D., and by the Wyoming Conference of the Rev. Edwin B. Olmstead, the latter to fill the vacancy caused by the death of Rev. J. O. Woodruff, D. D.

The following Trustees, whose terms expire in 1897, were reelected for the usual term of five years: James H. Alexander, James M. Buckley, Roswell S. Douglass, Andrew Longacre, and Frank S. Jones. With these was also elected Henry C. M. Ingraham.

An appropriate minute in regard to the death of Rev. J. O. Woodruff, D. D., was adopted and entered upon the records of the Board.

The President of the University was authorized to confer the following honorary degrees:—The degree of Master of Science upon Charles W. Stiles, Ph. D., of Washington, D. C.; the degree of Doctor of Divinity upon Rev. William L. Watkinson, M. A., of the Wesleyan Conference, England; Rev. Stephen O. Benton, of Fall River, Mass.; Rev. Frank B. Lynch, M. A., of

Philadelphia, Pa.; Rev. Warren L. Hoagland, of Passaic, N. J.: the degree of Doctor of Laws upon Professor John W. White, Ph. D., of Harvard University.

The following appointments were made to the Board of Instruction: Rev. Henry A. Starks, D. D., Lecturer on Ethics and Christian Evidences; Willard C. Fisher, B. A., Professor of Economics and Social Science; Frank W. Nicolson, M. A., Associate Professor in Latin; Alfred P. Dennis, Ph. D., Associate Professor in History; Albert B. Faust, Ph. D., Associate Professor in German; William S. Eichelberger, Ph. D., Instructor in Mathematics; Francis G. Benedict, Ph. D., Instructor in Chemistry; Charles H. Judd, Ph. D., Instructor in Philosophy; Olin F. Tower, Ph. D., Assistant in Chemistry; William M. Esten, B. S., Assistant in Biology; Edmund D. Searls, B. A., Assistant in Physics; Ernest K. Smith, B. A., Assistant Secretary of the Faculty; Louis A. Norris, Assistant Librarian; Samuel W. Loper, M. A., Curator of the Museum; Fred W. Marvel, B. A., Director of the Gymnasium; Olin S. Blakeslee, Mechanician.

The recommendations of the President's report concerning the enlargement and improvement of the facilities in the machine shop were approved.

The inequality in length and difficulty of the required courses for admission to college—the requirements of the Latin-Scientific and Scientific courses being less than those of the Classical course—were carefully considered, and the suggestions of the President's report looking toward an equalization of these requirements were adopted. [See page 7.]

The appropriation for free tuition—this year fixed at \$12,500—was authorized.

The Visiting Committee to the College appointed for the year 1896-97 consists of Rev. J. M. Buckley, D. D., LL. D., Rev. C. W. Gallagher, D. D., and Rev. A. W. Hazen, D. D.

ALUMNI ASSOCIATION.—The annual meeting of the Association was held on Tuesday of Commencement week.

Hon. Darius Baker, M. A., and Rev. George H. Whitney, D. D., were elected representatives of the Association on the Board of Trustees.

A portrait of Orange Judd, the gift of Mr. and Mrs. G. Brown Goode, was presented to the College by Prof. W. O. Atwater, and was accepted in behalf of the Trustees by Bishop E. G. Andrews. A vote of thanks was extended to Mr. and Mrs. Goode by the Alumni Association.

Prof. J. M. Van Vleck, in behalf of the Alumni Library Committee, reported that it had been decided to fix the sum to be raised at \$50,000, inclusive of the original fund of \$15,000. He also stated that Mr. J. E. Andrus had expressed his willingness to give one dollar for every three dollars subscribed. Since the last meeting of the Association subscriptions to the amount of \$10,000 have been made.

A resolution was adopted declaring that the Alumni considered the possession of an enclosed athletic field one of the most pressing needs of the University.

THE FINANCES.—The following is a brief statement of the property of the College, according to the most recent appraisal, and of the income and expenditure for the financial year 1895-96:—

Property of the University.

Invested funds and productive real estate, - - -	\$1,112,975 00
College buildings and campus, - - - - -	531,300 00
Unproductive real estate, - - - - -	38,500 00
Scientific collections and apparatus, - - - - -	83,755 00
Library, - - - - -	45,000 00
Furniture in various College buildings, - - -	8,480 00
Subscriptions to endowment funds, paying interest, -	1,000 00
Cash, - - - - -	14,323 00
Total, - - - - -	\$1,835,333 00

Income from May 31, 1895, to May 30, 1896.

Students' bills,* - - - - -	\$41,439 85
Interest on investments, and rents, - - - - -	56,998 68
Alumni Library income, - - - - -	1,068 43
Miscellaneous, - - - - -	1,163 78
Special subscriptions (for the Library, \$1,720.33), -	5,572 13
Balance in hands of Treasurer, May 31, 1895, -	526 61
Total, - - - - -	\$106,769 48

* Inclusive of \$14,000 tuition remitted.

Expenditures from May 31, 1895, to May 30, 1896.

Salaries, - - - - -	\$55,908 50
Fuel, light, water, insurance, - - - - -	4,136 36
Repairs and improvements, - - - - -	7,236 15
Women's Dormitory, - - - - -	5,620 66
Departmental appropriations, - - - - -	2,028 29
Library, - - - - -	3,361 93
Janitorial service, - - - - -	4,013 25
Aid to students—tuition, - - - - -	14,171 10
Interest, annuities, and scholarships, - - - - -	2,558 95
Gymnasium building fund, - - - - -	1,154 69
Printing, postage, Catalogues, Alumni Record, Bulletins, etc.,	2,786 95
Miscellaneous, secretarial assistance, Commencement ex-	
penses, prizes, etc., - - - - -	3,560 84
Balance on hand, May 30, 1896, - - - - -	231 81
Total, - - - - -	\$106,769 48

A comparison of these figures with those for 1892 shows an increase in income of \$18,226.30 and in expenditures of \$17,596.33; a gratifying proof of the growth of the College, and of the prudent administration which has kept the expenditures as closely as possible within the limits of the income.

PHI BETA KAPPA.—On the evening of June 23, the address before this Society was delivered by Professor John Williams White of Harvard University, who chose for his subject, The Greek Poets. With fine scholarship and appreciative criticism the speaker indicated some of the characteristics of the great poets of Greece, showed their influence on modern literature, and closed with an earnest appeal for a larger recognition of the value of poetry, and especially of the old poets, in our modern life.

APPOINTMENTS TO THE FACULTY.

REV. H. A. STARKS, D. D., elected Lecturer on Ethics and Evidences of Christianity for the year, is a graduate of Wesleyan University in the class of 1869. After his graduation he pursued theological studies for three years in Union Theological Seminary and in Boston University; and since 1872 has been engaged until about two years ago in the active work of the ministry. He received the degree of Doctor of Divinity from his Alma Mater in 1890.

ALBERT B. FAUST, elected Associate Professor of German in June, received the degree of B. A. from the Johns Hopkins University in 1889. He continued his study there in the departments of German, English, Romance Languages, and History, and was appointed Fellow in German, 1891-92. At the close of that year he received the degree of Ph. D. from the Johns Hopkins University. In October, 1892, he matriculated at the University of Berlin, and after spending a year of study and travel abroad was appointed, on returning, Instructor in German at the Johns Hopkins University, which position he held until called to Wesleyan.

Dr. Faust's publications are as follows: Doctor's Thesis—Charles Sealsfield (Carl Postl): Materials for a Biography; a Study of his Style; his Influence upon American Literature. Baltimore, 1892.

Unpublished Letters of Charles Sealsfield, Publications of the Modern Language Association, Vol. IX., No. 3. Baltimore, 1894.

For the purpose of publishing his biographical and literary study of Charles Sealsfield, Dr. Faust visited Germany during the past summer; the work has just appeared from the press of Emil Felber, Weimar, under the title, Charles Sealsfield (Carl Postl), der Dichter beider Hemisphären.

Dr. Faust has also edited, as a text-book, Zschokke's Das Abenteuer der Neujahrnacht, und der zerbrochene Krug. Holt & Co., N. Y.

MAX FARRAND, elected Instructor in History, was graduated from Princeton in 1892, with the degree of B. A. The year after his graduation he studied at Princeton, holding the Boudinot Fellowship in History, and receiving the degree of M. A. at the expiration of the year. The following year was also spent in study at Princeton as Fellow in Social Science. In the summer of 1894 Mr. Farrand went abroad to pursue his studies in Germany, and remained

there two years, spending his first semester at Leipzig, and the two following at Heidelberg. At the latter university he devoted his time to special work in political science under Professor Jellinek. He returned to this country last spring, and in June, 1896, received the degree of Ph. D. from Princeton, the subject of his thesis being "The Legislation of Congress for the Government of the Organized Territories of the United States. 1789-1895."

FRANCIS GANO BENEDICT, elected Instructor in Chemistry, was graduated from Harvard in 1893 with the degree of B. A. He studied during the year 1893-94 at Harvard, publishing two papers:—

(1) Double Haloids of Antimony and Potassium. (Proceedings of the American Academy of Arts and Sciences, Vol. XXIX., 212-227.)

(2) Double Haloid Salts of Antimony, Calcium and Magnesium, with observations on the remarkable dissociation of these compounds. (Proceedings of the American Academy of Arts and Sciences, Vol. XXX., 9-16.)

During the years 1892-94, he held an appointment as Instructor in Chemistry and Physics in the Massachusetts College of Pharmacy. In September, 1894, he went to Germany, and spent two semesters working under Professor Victor Meyer at Heidelberg, where he received the degree of Ph. D. in August, 1895. The title of his thesis was "Ueber die Jodoniumbasen aus p-Bromjodbenzol." The year 1895-96 he spent at Wesleyan as Expert Assistant in Food Investigations of the U. S. Department of Agriculture.

GEORGE H. LING, recently elected Instructor in Mathematics, in place of W. S. Eichelberger, Ph. D., resigned, was graduated from the University of Toronto, in 1893, with first-class honors in Mathematics. Immediately on graduation he was appointed University Fellow in Mathematics in Columbia University. He was in residence at Columbia during the three academic years 1893-96, spending also the summer of 1894 in mathematical study at the University of Chicago. He received from Columbia University the degree of M. A. in 1894; in July of that year he was appointed Assistant in Mathematics in Columbia, and held that position till his appointment at Wesleyan. He received the degree of Ph. D. from Columbia in June last. His Doctor's Dissertation "On the Solution of a Certain Differential Equation which presents itself in Laplace's Kinetic Theory of Tides," was published in the *Annals of Mathematics*, for June, 1896.

CHARLES HUBBARD JUDD, elected Instructor in Philosophy last March, was graduated from Wesleyan University with the degree of B. A. in 1894. Immediately after graduation he went to Germany, and spent the two academic years 1894-96 in the University of Leipsic. His study here was given chiefly to the subject of experimental Psychology in the laboratory of Professor Wundt. He received the degree of Ph. D. in February, 1896.

Dr. Judd has published the following articles during the past year and a half: Philosophy in the German Universities, *Science*, Vol. II., No. 31, August, 1895;

several reviews in the *Psychological Review*, Vols. II., III., 1895-96; his Doctor's Dissertation, "Ueber Raumwahrnehmungen im Gebiete des Tastsinnes," in Wundt's *Philosophische Studien*, Bd. XII., Hft. 3. In addition to the above publications, Dr. Judd has made a translation of Wundt's *Grundriss der Psychologie*, which will appear shortly from the press of Engelmann, in Leipsic.

CHANGES IN REQUIREMENTS FOR ADMISSION.

The inequality in the length of the different courses required for admission to College has been felt in past years as a serious evil. It has been possible to enter on the Scientific Course with considerably less study than on the Latin-Scientific, and to enter on the latter with considerably less study than on the Classical. A part of this inequality will be removed by changes in the requirements for the Latin-Scientific and the Scientific Courses, which will go into effect in 1898. It is expected to celebrate the opening of the new century by making the requirements for all the courses equal in 1901.

The requirements for admission to these courses, as prescribed for 1898, will be fully stated in the Catalogue for this year, but may be summarized as follows:—

For the Latin-Scientific Course:—English, Mathematics, and Latin (including Ancient History and Geography), as required for the Classical Course; two additional courses, to be selected from the following list (provided that at least one course in Modern Languages must be selected): I. French, II. French, I. German, II. German, Physical Geography and Botany, I. Physics, I. Chemistry, History of the United States and England.

For the Scientific Course:—English and Mathematics, as required for the Classical Course; History of the United States and England; the equivalent of five additional courses, to be selected from the following list (provided that at least one course in Modern Languages and at least one course in Natural Science must be selected): two years of Latin (counting as three courses), I. Mathematics (counting as two courses), I. French, II. French, I. German, II. German, Physical Geography and Botany, I. Physics, I. Chemistry.

DEPARTMENT NOTES.

LATIN.—The subject of the Phi Beta Kappa Prize for the current year is, The Life and Times of Tiberius. Contestants will be assumed to be familiar with Tacitus *Ann.* I.-VI., Suetonius *Tiberius*, Velleius Paterculus II., 94-131, Dio Cassius LVII., LVIII.; and as thorough an acquaintance as practicable with modern critical literature on the subject will be found decidedly advantageous. Each contestant will also present at the time of the examination a

previously prepared translation into Latin prose of the paragraph in Capes' *Early Empire*, beginning *From such duties* (p. 48), and ending *the heart of Germany* (p. 49).

GREEK.—The courses in Biblical Greek (VI.), Greek Archaeology (X.), and Greek Epigraphy (VIII.) are omitted this year, but two new courses have been added. Of these two courses, one given by Professor Van Benschoten consists of lectures with collateral reading on Greek Literature (XI.), and the other, which is in charge of Dr. Paton, is a study of the Constitutional History of Athens based upon the recently discovered work of Aristotle. The Spinney Prize is offered as usual for work in connection with II. Greek. The special subject this year is, The Treatment of the Legend of Oedipus by the Greek Dramatists. In addition to the work of the first half-year in II. Greek, contestants will be expected to read in Greek the *Antigone* of Sophocles and the *Seven against Thebes* of Aeschylus, and in English the *Oedipus at Colonus* of Sophocles and the *Phoenissae* of Euripides. A list of collateral reading, which will prove helpful in the study of the subject, will be furnished by the instructor.

GERMAN.—The following courses are given this year:—

I. Otis,—Elementary German, Part I., Lessons I.-XXIV. Harris,—German Reader. Heyse,—*L'Arrabbiata*. Goethe,—*Egmont*. Harris,—German Composition. Thomas,—Practical German Grammar. *Three hours weekly*.

II. (a) Readings,—*Classical*: Schiller,—*Wilhelm Tell*; Goethe,—*Hermann und Dorothea*. *Scientific*: Hodges,—*A Course in Scientific German*; Helmholtz,—*Goethe's Naturwissenschaftliche Arbeiten*.

(b) Prose Composition and Grammar. von Jagemann,—*German Prose Composition and German Syntax*.

(c) German Literature. Kluge,—*Geschichte der deutschen National Literatur*. *Three hours weekly*.

III. German Conversation. For the purpose of acquiring a vocabulary and readiness in the use of German, the following phrase-books serve as guides: Whitcomb and Otto,—*German and English Conversations*; Meissner,—*Practical Lessons in German Conversation*. All class exercises are conducted in the German language. Lectures in German are given on subjects connected with German Geography and Kulturgeschichte. *One hour weekly*.

IV. German Lyrical Poetry. Readings and lectures; the period chosen for special study being the nineteenth century. *One hour weekly*.

V. Goethe's *Faust*,—Part I. and selected portions of Part II. A critical study of the text, and discussion of the questions concerning the beginnings and composition of the drama. *Two hours weekly, first half-year*.

VI. Middle High German. *Two hours weekly, second half-year*.

Courses V. and VI., counting as three times a week, are elective for those who have taken II. German.

ENGLISH LITERATURE.—The work of the Senior elective course in English Literature, this year, is devoted to a group of representative Victorian writers—Carlyle, Ruskin, Matthew Arnold, Tennyson, Browning. The class meets this year three times a week, instead of twice as heretofore.

But one graduate course is offered this year. The subject of the course is, English Criticism and the changes in English literary standards, 1745-1832.

ENGLISH LANGUAGE.—An advanced course in Old English poetry is given this year. The work is chiefly based upon Beowulf, with supplementary linguistic exercises involving comparison of Old English and Gothic forms.

HISTORY.—The only changes to be made this year in the courses of instruction offered in the Historical Department are, that the History of England and France (III.) will be omitted during the first half-year, but will be given in shortened form the second half-year; and in the Historical Seminary (VI.) instead of the topic announced, The Public Law Systems of England and of the United States, subjects in the Constitutional History of the United States will be discussed.

ECONOMICS AND SOCIAL SCIENCE.—Course II. in the history and advanced theory of economics is omitted this year. Course III. in public finance, which was omitted last year, is given this year with Plehn's *Introduction to Public Finance*, the first and only American treatise on the subject, substituted for the English book which was formerly used. The course in Money and Banking is condensed into the first half-year; and it is followed in the second half-year by a course on the general labor problem. The course which was numbered V. last year is this year separated into two distinct courses, one dealing with sociology or the fundamentals of the social structure and growth, and the other with certain concrete social problems.

PHILOSOPHY.—I. The changes announced in the last BULLETIN have been carried into effect, with a few minor variations in method which approved themselves on further consideration of the practical questions involved. Chief among these has been the abandonment of the text-book altogether in Course VIII., Advanced Psychology, in favor of the topical method of study.

2. In addition to the courses previously announced, Course IX., Readings in Modern Philosophy, is given in 1896-97. The work is based on selections from Locke, Berkeley, Hume, and Kant. This course was given in 1890-93 by Professor Armstrong. It is now revived under the direction of Dr. Judd and becomes again an integral part of the philosophical curriculum.

3. With the consent of the head of the department of German, an optional course has been begun, under the charge of Dr. Judd, in the reading of philosophical German. The text used is Wundt's *Grundriss der Psychologie*. This course is not open to general election, nor can it be counted for a degree, but is altogether a matter of private arrangement. It is mentioned here as an

example of a kind of work under the immediate direction of the instructors of the department, which the enlarged facilities at their disposal enable them to offer to advanced students when there is need or desire for it.

PHYSICS.—During the summer the College machine shop has been removed from the dynamo room, where it has been situated for the past five years, to the room adjacent, which has heretofore been used as a carpenter shop. This transfer has not only increased greatly the facilities of the College machine shop, but has set the dynamo room entirely free for experimental work with dynamos, motors, transformers, and the heavier electrical apparatus. An important addition to the equipment of the dynamo room is the new arc-light dynamo, lately presented to the College, and noticed elsewhere in this BULLETIN. Another important addition to the department is a large induction coil, imported from Keyser and Schmidt, of Berlin.

In addition to the Physical Journal Meeting which has been conducted for some years, a Physical Seminary has this year been established.

CHEMISTRY.—Several minor changes have been made in the regular courses in Chemistry, and one new course in Physical Chemistry has been added. Course II. is given twice a week in the first half-year, instead of once a week through the entire year as hitherto, and is no longer required of students who elect Courses III., V., VII., and IX.

Course V. is given this year three times a week, instead of two as formerly. The increase in the time devoted to this course was made in order that more attention might be paid to some of the applications of organic chemistry to the arts.

Course X., which is given this year for the first time, is designed primarily as an elementary course in Electro-chemistry. After a few introductory lectures, the physics of solutions are discussed. Electro-chemistry will occupy the last two terms. The topics to receive particular attention will be: The Dissociation Theory of Arrhenius; the Conductivity of Electrolytes; and Electromotive Forces, together with the application of the laws of Helmholtz and Wernst. The course is given by Dr. Tower, and is elective for those who take or have taken Course III.

A very considerable increase in the number of students taking the more advanced laboratory courses has made necessary the construction of several new desks. The large laboratory room will now accommodate about forty students. A few simple and much-needed changes in the lecture room make it now possible to experiment in class with dangerous and ill-smelling gases without danger or discomfort either to instructors or students.

BIOLOGY.—The course in Practical Biology for Juniors (IV.) has been materially changed and will include hereafter several weeks' work upon the chief classes of flowerless plants. This additional work is supplementary to the course in Botany, and is included in the Practical Biology course because of the

increased demand on the part of the lower schools for teachers in science who are familiar with Cryptogamic Botany. The new work will occupy most of the Fall term, but it is expected that its introduction will not interfere materially with the work which has been included hitherto in the practical courses.

RECENT GIFTS.

The College has received an additional \$3,859.63 from the estate of E. J. Baker.

A gift of \$5,000 toward the endowment of a chair for the study of the English Bible has been made by Frank S. Jones, Esq.

A special subscription of \$3,500 was raised by the Trustees to forestall a deficit in the current expenses of the past year.

The Alumni Library fund has been increased by \$890.

The following gifts to the Gymnasium fund have been received: Charles O. Stone, \$300; Lyman D. Mills, \$100; Charles L. Rockwell, \$100.

Through the kind services of Mr. J. A. Dalzell, the department of Physics has recently received from the Brush Electric Company, of Cleveland, Ohio, one of their well-known arc-light dynamos. It furnishes a current of 6.5 amperes to eight arc lights, and is a valuable accession to the electrical machinery of the department.

THE MUSEUM.

Towards the close of the last college year, a valuable collection of relics from Indian mounds in the vicinity of Chattanooga, Tenn., was offered for sale to the authorities of the College at a price of \$1,000. This collection had been made by Mr. George D. Barnes, United States Deputy Marshal. Mr. Barnes' frequent journeys through the wild and mountainous country in the vicinity of Chattanooga, in the discharge of his official duties, had given him opportunity to make very extensive explorations and to collect a great quantity of valuable material. The collection included about 14,000 objects of various kinds. There being no funds available for the purchase of the collection, the officers of the Museum were compelled to decline the offer; but Mr. A. R. Crittenden, already well known as one of the most generous friends of the Museum, purchased the collection on his own responsibility, and has deposited it in the Museum of Wesleyan University. Negotiations are in progress for the sale of a part of the collection to other institutions. The remainder will be placed on exhibition in our Museum as soon as the necessary arrangements can be made. It is hoped that within a short time money may be raised for the purchase of that part of the collection, so that it may become the property of Wesleyan University. Mr. Crittenden himself has started the subscription with a contribution of \$100.

Mr. Loper, the Curator of the Museum, went to Chattanooga to attend to the cataloguing and boxing of the collection. He improved the opportunity of the journey to make extensive paleontological collections, and there have been thus added to the Museum about 4,000 specimens of Lower Silurian and Subcarboniferous fossils. On his return from Chattanooga, Mr. Loper visited the remarkable locality of Subcarboniferous crinoids at Crawfordsville, Ind., and purchased a choice collection of them for the Museum, the money being contributed by Mr. Henry I. Nettleton, of Durham.

Since the beginning of the present term, a valuable collection of Coleoptera, belonging to Mr. Alphonse Bel, has been purchased, and presented to the Museum, by Mr. Richard L. de Zeng. The collection includes about 1,400 specimens, representing about 400 species, chiefly from Europe, Africa, and Central America.

ALUMNI ASSOCIATIONS.

The winter reunions of the Alumni began with the ninth annual meeting of the Association of Southern California, which was held at Los Angeles on September 25, under the presidency of the Rev. J. P. Lee. Including invited guests, the attendance at the dinner was about twenty-five. Speeches were made by Bishop Foss and several others, and the meeting is reported a very successful one.

The meetings of the Boston and New York Alumni Associations will occur soon, but no precise announcements can be made at present.

The club which was founded a short time ago by the young Alumni of New York, had a number of successful meetings last winter, and expects to continue its activity during the coming year.

COMMITTEE OF CONFERENCE OF CONNECTICUT COLLEGES AND SECONDARY SCHOOLS.

About one year ago an organization was formed under the above title, "to provide for examinations of High Schools and other institutions of similar grade and to consider any subjects of common interest with a view to securing a more harmonious coöperation of the colleges and the schools." The Committee consists of nine members, three chosen by the Connecticut Association of Classical and High School Teachers, and two from each of the three colleges in the State.

On the request of any school which prepares students for college, this Committee will send one or more competent teachers to visit the school and examine its work in detail. These examiners submit reports in writing to the Committee; and a formal report embodying the conclusions of such examination, with any criticism or suggestion it may seem to warrant, is then rendered by the

Committee to the officers of the school. In the conduct of examinations, the studies of the school are divided into the following departments: 1. Ancient Languages; 2. Modern Languages (exclusive of English); 3. English Language and Literature; 4. History (including Economics and Civics); 5. Mathematics; 6. Science (Physical and Natural). The examination may extend to one or more of these departments, and in every case a separate examiner will be assigned for each department.

The representatives of Wesleyan on the Committee are Professors Rice and Winchester. The secretary of the Committee is Professor F. S. Luther, of Trinity College, Hartford, to whom all letters respecting the work of the Committee should be addressed.

GEORGE BROWN GOODE.

[The following sketch of the late G. Brown Goode, Curator of the National Museum, is taken, with slight abridgment, from the columns of the *College Argus*.]

During the summer vacation the alumni of Wesleyan University have lost from their ranks one most eminent for scientific attainments and public services.

G. Brown Goode was born in New Albany, Ind., Feb. 13, 1851, and died in Washington, D. C., Sept. 6, 1896—a life short in years, but long as measured by its achievements.

He studied in Wesleyan University, and was graduated in 1870. His work in college in the studies of the natural history group attracted the favorable notice of his teachers, and led to his appointment as Assistant Curator of the Museum. After a few months of graduate study in Harvard University, he entered upon his work in Wesleyan early in 1871.

The Orange Judd Hall of Natural Science, the munificent gift of Orange Judd, was then in process of erection. It was dedicated during Commencement week in 1871. Before that time the Natural History collections of Wesleyan University were scattered in several buildings, very imperfectly labeled and arranged, and mostly inaccessible to students or visitors. The spacious rooms in Judd Hall first gave the opportunity to arrange and display those collections in such manner as to give them the dignity of a museum. It was in the installation of the comparatively humble collections in Judd Hall that Dr. Goode first showed that genius for museum administration which he was destined afterwards to display in a larger field. In 1871, his title was changed to Curator of the Museum, and in that capacity his name appears in the Catalogues until 1879.

The U. S. Commission of Fish and Fisheries was organized about the time that Dr. Goode commenced his work in the Wesleyan Museum. In the early years of the decade between 1870 and 1880, the work of exploration of the marine zoölogy of our coast, under the auspices of the Fish Commission, was largely carried on by officers of various colleges, who were willing to serve as

volunteer assistants, for the opportunities which the service afforded of study and of collecting for the museums with which they were connected. In this capacity, Dr. Goode worked for several summers, and rich collections were added each year to the Museum of Wesleyan. To Dr. Goode, the work of these summers in the Fish Commission opened the way to the official career in which he was destined to achieve such distinction.

It was in the summer of 1872, at Eastport, that he first attracted the attention of Professor Baird, who was then at the head of both the Fish Commission and the National Museum. Professor Baird invited him to spend the following winter in Washington, to classify and distribute an immense amount of duplicate material which had accumulated in the National Museum, taking his pay in specimens for the Museum of Wesleyan. He became thus an Assistant in the National Museum, while still holding the position of Curator at Wesleyan.

Dr. Goode was soon recognized as indispensable in the National Museum. In 1875, he was made Assistant Curator; and, in 1877, he was promoted to be Curator. In 1881, he was made Assistant Director; and, on the death of Professor Baird, in 1887, Dr. Goode became Director of the National Museum and Assistant Secretary of the Smithsonian Institution. To his genius is largely due the eminent rank which the U. S. National Museum now holds among the great museums of the world, in point of methods of installation and arrangement. But the work of the National Museum itself is only a part of the museum work which Dr. Goode accomplished. He was in charge of the exhibits made by the National Museum at the Centennial Exposition in Philadelphia, at the expositions in New Orleans, Cincinnati, Louisville, and Atlanta, and at the Columbian Exposition in Chicago; and each of these expositions gave new evidence of his mastery of museum administration.

The connection with the U. S. Fish Commission which he formed as a volunteer assistant in 1872, he kept up for many years. In 1877-78, he was employed by the United States as statistical expert in the proceedings of the Fishery Arbitration Commission at Halifax. In 1889-91, he had charge of the investigation of the fisheries for the United States Census. He was Commissioner for the United States at the fishery exhibitions in Berlin in 1880, and in London in 1883. In 1887, he was appointed U. S. Commissioner of Fish and Fisheries; but there was a limit even to his power of administrative work, and he accepted the appointment only to provide for a temporary emergency in the history of the Commission, and speedily resigned.

In museum administration, Dr. Goode was preëminent. He was master of it in theory and practice. He had seen and studied all the important museums of Europe; and knowledge of all that was best in the experience of other institutions joined with inventive genius to make his work in the National Museum so admirable.

The amount of administrative work belonging to the various offices which he held, left comparatively little time for scientific investigation. He accepted loyally and unselfishly the duties of the offices to which he was called, sacrificing

in large degree the reputation which he might have gained as an original investigator in science. He sacrificed, indeed, not only reputation, but eventually even life, for it was undoubtedly the overwork demanded by his manifold official duties that enfeebled his constitution, and made him an easy prey to the final attack of disease.

His purely scientific work was in the line of Ichthyology. He was especially an authority on the pelagic and abyssal fishes. The great work on Oceanic Ichthyology, of which he and Dr. T. H. Bean were joint authors, was published in 1895. He was also an authority on the subject of fisheries. He was the chief editor of the seven quarto volumes on the Fisheries and Fishery Industries of the United States, published by the U. S. Fish Commission.

He had a fondness for bibliographical, genealogical, and statistical work, which led him sometimes altogether aside from his purely scientific pursuits. He was one of the editors of the editions of 1873 and 1883 of the Alumni Record of Wesleyan University. His work on the history of his own family was published under the title, "Our Virginia Cousins."

Throughout his life, he cherished a loving and loyal interest in the college with which his early years of study were associated, and which was proud to recognize his later achievements by giving him the honorary degree of LL. D. He was the donor of the Goode Prize, which has helped to stimulate interest in the studies which he so loved.

He was a man pure, honest, and generous in every relation. In the life of the national capital, where the crookedness of politics sometimes penetrates into the scientific bureaus, he maintained unswerving integrity. His sympathy, counsel, and help were always ready for any of his fellow-workers in science. His death was felt as a personal bereavement by all the employees of the Smithsonian Institution, from the highest officer to the humblest laborer. To know him was to respect him. To know him well was to love him.

WILLIAM NORTH RICE.



CALENDAR.

1896.

- Oct. 1, Thursday,—College Year began.
Nov. 25, Wednesday,—Thanksgiving Recess will begin.
Nov. 29, Sunday,—Thanksgiving Recess will end.
Dec. 23, Wednesday,—Christmas Recess will begin.

1897.

- Jan. 5, Tuesday,—Christmas Recess will end.
Jan. 28, Thursday,—Day of Prayer for Colleges.
Feb. 12, Friday,—Feb. 20, Saturday,—Mid-year Examinations.
Feb. 22, Monday,—Washington's Birthday, a holiday.
Mar. 31, Wednesday,—Spring Recess will begin.
April 6, Tuesday,—Spring Recess will end.
April 22, Thursday,—Junior Exhibition.
June 30, Wednesday,—COMMENCEMENT.

— THE —
Wesleyan University Bulletin.

MIDDLETOWN, CONN.

MAY, 1897.—No. 20.

THE Court of Appeals of the State of New York has confirmed the decisions of previous Courts, with regard to the distribution of the residue of the Fayerweather estate; and there now appears to be good reason to hope that at no distant date the funds of the University will receive from that source about \$150,000.

Attention must again be called to the fact that the Permanent Endowment Fund for the Library yet lacks several thousand dollars of the desired \$50,000. Constant, but not very rapid, progress is being made by the Committee in charge of the subscription fund. A concerted effort might round out the entire sum by the end of Commencement week, with the result of enhancing to an incalculable extent the efficiency of every department. No need of the Institution is more pressing than that of new books for advanced investigation.

By the recent action of the Board of Trustees an addition has been made to the corps of instruction in the department of Latin for the coming year. Next year, therefore, there will be in this department a Professor, an Associate Professor, and an instructor.

Since the last issue of the BULLETIN, H. W. Hayley, Ph. D. (Harvard), has been appointed Instructor in Latin for the remainder of the College year.

In the absence of the President, the Baccalaureate Sermon this year will be preached by Rev. Bishop W. N. Ninde, D. D., LL. D.

The University Sermon on Sunday Evening is to be preached by Rev. Henry van Dyke, D. D., of New York.

In compliance with the repeated requests of the student body, a number of the Faculty have delivered public lectures before the College this year. The

general stimulation of the intellectual interests of the College community by such a course of lectures is undoubtedly great; but still greater interest, to say nothing of increased attendance, might be secured by a lecture fund sufficient to enable the College to provide addresses by distinguished specialists in various departments. Such lecture funds are among the most valuable educational aids in more than one institution.

Professor Conn has been granted leave of absence for the next collegiate year, and he will improve the opportunity thus afforded for advanced study and investigation in Europe.

TRUSTEE MEETING.

The adjourned annual meeting of the Board of Trustees of Wesleyan University was held in New York City, March 26, 1897, with twenty members present. Routine business was transacted.

Acting-President Van Vleck presented a report on the state of the College.

A committee consisting of J. M. Buckley, J. E. King, and E. G. Andrews was appointed to prepare suitable minutes on the decease of Rev. Morris D'C. Crawford, D. D., and Mark Hoyt.

The Board authorized the publication of a new supplement to the "Alumni Record," bringing the list of names of the alumni down to the present time.

The committee appointed to draft a plan for the regulation and order of leave of absence of professors presented its report. Final action was deferred to the next Trustee Meeting, and provision was made for granting leave of absence to one of the professors during the next academic year.

The appointment of H. W. Hayley, Ph. D., as Instructor in Latin for this year was confirmed, and a similar increase in the Latin department was authorized for the coming year.

THE FAYERWEATHER WILL LITIGATION.

The generous provision made in the will of Mr. Daniel B. Fayerweather, of New York, for some twenty colleges and other institutions, is well known. Many of these, including Wesleyan University, received by direct bequest \$100,000 each. The original will further provided that after all other specific legacies were paid, the residue of the estate should be divided equally among the same colleges and institutions. Later, to avoid the conflict of this provision of the will with a statute of the State of New York prohibiting the bequest of more than one-half of an estate to benevolent objects, Mr. Fayerweather added a codicil, giving the residual estate absolutely to the executors.

When the will was offered for probate, objection was filed by Mr. Fayerweather's immediate relatives. It was urged, not only that the will was not

executed in due form, but that one of the codicils was added when Mr. Fayerweather was incapable of making a will and was subject to undue influence. Before any decision on these points was rendered by the Surrogate, the executors and Mrs. Fayerweather reached a settlement, by which additional provision was made for her and other relatives, and in return she gave a release from further claim upon the property. In connection with this settlement the executors executed a deed of gift, dividing this residue among various institutions—but giving to some not named in the will, as well as omitting others thus named. By this deed of gift Wesleyan University was to receive \$50,000.

The first suit of importance was commenced by five of the colleges mentioned in the will but not included in the deed of gift. The claim set up was that by agreement between Mr. Fayerweather and the executors a secret trust had been established, under which the residual estate was to be divided as in the original will. In support of this claim a paper was produced containing such direction or request from Mr. Fayerweather. The suit was tried before Judge Truax at a Special Term of the Supreme Court of the State of New York, and decision rendered in favor of the contesting colleges. Upon appeal to the General Term of the Supreme Court, and finally also to the Court of Appeals, the decision of Judge Truax was affirmed. The secret trust was upheld, inasmuch as the only parties who could contest the legality of the trust had executed the release above mentioned. By this decision it is expected that Wesleyan University will eventually receive about \$150,000, instead of \$50,000 under the deed of gift.

Recently a new suit has been instituted by the heirs of Mrs. Fayerweather, setting forth that an additional codicil, which had been duly executed by Mr. Fayerweather, had been destroyed by one of the executors when Mr. Fayerweather was incapacitated from giving assent, and demanding that the unknown contents of this codicil should be disclosed. This suit has not yet been brought to trial. The same is true of another suit brought in the interests of the same parties before the United States Circuit Court. It is believed, however, that a final settlement of the issues involved in the suits will soon be effected outside of the courts.

DEPARTMENT NOTES.

LATIN.—With the beginning of the next college year, Associate Professor Nicolson expects to resume about six hours a week of class-work in Latin, devoting the rest of his time to the duties of Secretary of the Faculty. The prospective additional assistance in the department of Latin will make possible only the division of the class in I. Latin into three divisions, instead of two, as heretofore, and the offering of additional elective instruction to the amount of two hours a week. But a considerable rearrangement of the elective courses in adjustment to these new conditions is contemplated, the details of which will be published in the forthcoming circular of Courses of Instruction for 1897-98. The proposed new courses offered for next year are mentioned here.

VI. and VII. A course in Rapid Reading, twice a week through the year, offered by Professor Merrill, open to those who have taken Course I. It is designed to assist in the cultivation of facility in the oral reading of Latin, and in the understanding of the language at sight and at hearing without translation. This course will not be counted toward the satisfying of requirements 1 and 3 noted on page 63 of the Catalogue for 1896-97.

XIII. and XIV. The course in Roman Satire will be restored to its earlier form, extending through the entire year, but elective for either half-year separately.

XV. A course in Roman Literary Criticism, twice a week through the year, offered by Professor Merrill, open to those who have taken Course I., and at least two of Courses II.-VII. The aim of the course is to examine the canons of literary taste and criticism among the Romans, and incidentally to study the marked characteristics of style in the different forms of Roman literature.

GREEK.—The courses in the Greek Drama (IV.), Greek Literature (XI.), and the Constitutional History of Athens (IX.) will be omitted next year, while the courses in Greek Philosophy (V.), Biblical Greek (VI.) and Greek Archaeology (X.) which were not offered this year, will be given. In place of the course in Greek Epigraphy, which has been temporarily withdrawn, Dr. Paton offers a one-hour elective course based on Aristotle's Poetics, and including a study of the principal forms of Greek poetry. This course will be open to Juniors and Seniors, provided the consent of the instructor is obtained. The work of the Freshman year is to be divided into two half-years, instead of three terms as at present. In the first half-year Lysias and Herodotus will be read, and in the second, Plato's Apology and Crito, and Homer. This will cause a slight increase in the amount actually read, and also furnish a greater variety of topics than it has hitherto been possible to secure.

GERMAN.—The following advanced courses in German will be given next year:

VII. Middle High German. Paul,—Mittelhochdeutsche Grammatik, 4te. Auflage 1894. Das Nibelungenlied, herausgegeben von Zarncke. Walther von der Vogelweide, herausgegeben von Paul. *Once a week.*

VIII. The History of German Fiction. Lectures and reports: Earliest prose fiction, Grimmshausen's *Simplicissimus* (17th century). The *Robinsonaden*, and English influence (18th century). Goethe's *Wilhelm Meister*. The Romanticists. Foreign influences (Scott; the historical and exotic romances). The national, and the modern realistic novel. Readings: Goethe,—*Dichtung und Wahrheit*. Freytag,—*Soll und Haben*. Selected short stories of Auerbach, Storm, Heyse, Hillern, Ebner-Eschenbach.

Twice weekly (counting as three times a week).

Course VIII. is elective for those who have taken Courses I.-III., Course VII. for those who have taken Course VI., except in special cases where the instructor's permission has been obtained.

Courses IV. (Lyrical Poetry), V. (Goethe's Faust), and VI. (Middle High German, introductory course) are omitted in 1897-98, but will be given in alternate years.

ROMANCE LANGUAGES.—Two new courses will be offered next year. One (VI. French) will be in Medieval French Literature, consisting of lectures and collateral reading on romance, lyrical poetry, origins of the drama and religious and didactic literature. The other will be an advanced course in Italian (alternating with I. Italian), and the great poets will be read and studied. Lectures also on the history of the literature will be given. Those who intend electing the latter course, should inform the instructor of the fact before Commencement, in order that the books may be ordered in time.

ENGLISH LANGUAGE.—1. The course in Old English (Course IV., open to Sophomores who have taken Course I. A) will be given next year, instead of the year following. This course includes readings in Cook's First Book in Old English and in Bright's Anglo-Saxon Reader, as well as the study of Cynewulf's Elene or the Old English Chronicle, as the class may prefer. The history of Old English literature is treated in a course of weekly lectures. (See Course V.) *Twice a week.*

2. A course of lectures (Course V.) on the history of Old English literature before 1100 A. D., with some account of contemporary Germanic literature, will be given next year. This course is elective for all Sophomores, but is required of those who elect Course IV. Courses IV. and V. must be elected by all those who wish to elect the courses in Early English. *Once a week.*

3. The class in Sophomore Rhetoric will meet next year in two divisions instead of one large class, as heretofore. By the new plan more opportunity will be afforded for individual criticism and for variety in class-room methods.

HISTORY.—The course in English-French history, which has occupied two hours a week through the year, will be replaced by two courses, one in English and one in French history, to be given in alternate years. Next year English history will be treated in two half-courses; one on The Formative Period of English History, from the English Conquest to the close of the Hundred Years' War; the other on England under the Tudors and Stuarts.

The course on the political and economic history of the United States will be omitted next year, and two new half-courses on Government will be given. The first will treat of European Governments with Woodrow Wilson's State as a text-book; the second will deal with the Government of the United States, and will be based on Bryce's American Commonwealth.

The subject for the historical seminary in 1897-98 will be the History of the Theory of Secession.

ECONOMICS AND SOCIAL SCIENCE.—Heretofore, Course II., in the history and advanced theory of economics, has been given in alternate years with Course III., the public finance. Next year, however, both courses will be given; and thus for the first time the eight courses which are offered in the department, will all be brought into the same year.

PHILOSOPHY.—The principal changes in the work of the department for 1897-98 will be:—

1. The course in Introduction to Philosophy will be detached from Course IV., Advanced Logic. Hereafter, Introduction to Philosophy may be combined with Advanced Logic or with Course VI., Ancient and Mediæval Philosophy. As before, however, it may not be elected alone.

2. A new course will be offered by Dr. Judd, to consist of experimental research in relation to psychological problems of especial interest to the instructor and student. The course is planned primarily for honor candidates in psychology. It will be open, also, to graduate students, and to advanced undergraduates whose work in the preliminary courses of the department has been of a high order of merit.

The apparatus necessary for this course will be provided by the department. The chief additions to the collection during the current year have been various smaller pieces for demonstration and research in the fields of color-vision and space-perception, and a chronometric apparatus from Diedrichs of Göttingen, of importance in connection with the study of time-perception.

CHEMISTRY.—The results of several preliminary series of experiments with the respiration calorimeter have lately been published in outline in *Science* of March 26, 1897; and a somewhat more detailed account in the Report of the Storrs Experiment Station. A still more extended account has been furnished to the Government and will be published by the Department of Agriculture, under whose auspices the work is being carried out in coöperation with the Storrs Experiment Station. A more popular account has been furnished to the *Century Magazine* for publication in its issue for June, 1897. The experiments were made with men who spent, in two cases two and one-fourth days, in one case five days, and in one case twelve days, in the respiration chamber of the apparatus. The accounts thus far published apply only to the metabolism of matter in the body. The experience gained in these experiments has been utilized in the further development and perfecting of the apparatus. The arrangements for the determination of the quantity of heat given off from the body are now very satisfactory, so that experiments on the metabolism of both matter and energy are now being carried out. On the whole, the results give excellent promise for the future.

GEOLOGY.—Hereafter the first half of the course in Mineralogy—crystallography and optical mineralogy—may be elected, without the latter half. This will give to students specializing in physics an opportunity to study the physical relations of crystals without requiring them to study determinative and descriptive mineralogy.

BIOLOGY.—It is expected that Professor Conn will be absent in Europe during the next college year. During his absence the Biological Laboratory will be open as usual and the laboratory courses, IV. and V. Biology, will be conducted by Mr. Esten. Mr. Esten will also take charge of the course in

Botany, which will commence after the mid-year examinations instead of at the beginning of the Spring term. The other work of the Biological department will be omitted next year, but will be open for election to all students the following year.

The Summer School of Biology at Cold Spring Harbor will be conducted as usual during the summer. The absence of Professor Conn during the next year, makes it especially desirable that those who desire to attend the school should avail themselves of the privilege the coming summer.

During the present year Professor Conn and Mr. Esten have been carrying on extended researches in dairy bacteriology. The results which have been obtained are of much importance and have special value in relation to the vexed question of the stability of species among bacteria. The results of this work will be published during the next year.

LECTURES AND PUBLICATIONS BY MEMBERS OF THE FACULTY.

PROFESSOR RICE.—*Lectures*.—Modern Phases of Thought in Apologetics. Methodist Social Union, Boston, Mass., Jan. 18, 1897.

Bermuda. Scientific Association, Marion, Mass., Feb. 18, 1897.

The Yellowstone National Park. Trinitarian Church Club, New Bedford, Mass., Feb. 19, 1897; East Greenwich Academy, R. I., March 12, 1897.

The Reform of the Curriculum. Barnard Club, Providence, R. I., March 13, 1897.

The Characteristics of a True Christian Church. Sermon at the re-opening of Trinity M. E. Church, Springfield, Mass., Feb. 7, 1897.

Publications.—Review of Goode's "Principles of Museum Administration." *Science*, May 22, 1896.

Anticlinorium and Synclinorium. *American Journal of Science*, August, 1896.

The High School and its Relation to other Educational Institutions. *Special Report of Board of Education*, Middletown, 1896.

Report of Proceedings, Section E, American Association for the Advancement of Science. *Science*, Sept. 18, 1896.

Wesleyan University.—Chapter 67 of Davis' *The New England States*, 4 vols., Boston, 1897.

PROFESSOR ATWATER.—*Lectures*.—A course of five lectures on the Chemistry of Nutrition, under the auspices of the American Society for the Extension of University Teaching, at the University of Pennsylvania, Philadelphia, in July, 1896.

Economy of Food, at the Assembly, Plainville, Conn., in August, 1896; the same before the Itinerants' League of the New York Conference, in September, 1896.

Science and Home Life, at the Home Congress in Boston, in October, 1896.

Some Things the Church May Do Toward Improving the Food and Nutrition of the Poor, at the Hartford Meeting of the Open Institutional Church League, in October, 1896; the same before the Congregational Clerical Union of New York City, in January, 1897.

The Chemistry and Economy of Food, at Wilkes-Barre, Pa., in February, 1897; the same before the University Extension Society, Meriden, Conn., in March, 1897.

The Food and Nutrition of Ordinary People, under the auspices of the Board of Education of New York City, at Cooper Institute, in March, 1897.

The Nutrition of the Negro and His Welfare, at Hampton Institute, Hampton, Va., in April, 1897.

Publications.—In the *Annual Report of the Storrs Experiment Station for 1896*.—Report of the Director for the year 1896. Investigations on Metabolism in the Human Organism (with C. D. Woods and F. G. Benedict). Studies of Diets (with A. P. Bryant). Experiments on the Digestion of Food by Men. The Digestibility of Different Classes of Food Materials. The Average Composition of American Food Materials. Proportions of Digestible Nutrients in Food Materials. Analyses of Fodders and Feeding Stuffs (with F. G. Benedict).

PROFESSOR WINCHESTER.—*Lectures.*—Two lectures in the Auburn Theological Seminary: Clough and Arnold, or Religious Question in the Poetry of the Mid-Nineteenth Century.

Five lectures in Wells College.

Six lectures before the Brooklyn Institute, on Carlyle, Arnold, Tennyson, Browning.

Six lectures before the New Haven University Extension Society.

Four lectures in Brown University, on English Poetry, 1789-1832.

Two lectures in Wilkes-Barre, Pa.

Lectures in Springfield, Mass., Stamford, Conn., and before various schools.

Address before the Young Men's Sunday Evening Association of the First Congregational Church, New Haven, on The Bible as Literature.

Publications.—The following volumes have been issued in the Athenæum Press Series, which is under the editorial supervision of Professor G. L. Kittredge, of Harvard, and Professor Winchester:

Steele.—Edited by Professor George R. Carpenter, of Columbia University.

Carlyle.—Edited by Professor Archibald MacMechan, of Dalhousie College.

PROFESSOR CONN.—*Lectures.*—Impurities of Milk. The Home Congress at World's Food Fair, Boston, Mass., Oct. 10, 1896.

Bacteria as Enemies and Bacteria as Friends. Scientific Association, Bridgeport, Conn., Dec. 3 and 10, 1896; the same before the University Extension Society, Meriden, Conn., Jan. 15 and 21, 1897.

Milk Impurities. New Jersey State Board of Agriculture, Trenton, N. J., Jan. 15, 1897. Published in the Annual Report.

Nature's Food Supply. East Greenwich Seminary, Jan. 21, 1897.

The Chief Steps in the Discovery of the Germ Theory of Disease. The Brooklyn Institute, March 8, 1897.

Jelly Fishes. The Brooklyn Institute, April 13, 1897.

Publications.—Bacteria in the Dairy. *Bulletin No. X, of Storrs Experiment Station.*

The Relation of Pure Cultures to Acid, Flavor, and Aroma of Butter. *Centralblatt für Bacteriologie*, II., Vol. II., p. 409.

Bacteria in the Dairy. *Bulletin No. XI. of Storrs Experiment Station.*

Lessons in Elementary Practical Bacteriology (illustrated). *The Observer*, May, June, and July, 1896.

Butter Aroma. *Centralblatt für Bacteriologie*, II., Vol. III., p. 177.

PROFESSOR MERRILL.—*Lectures*.—Two lectures on the Roman Principate, "The Prince as Magistrate," "The Prince as Master," before the Philadelphia Summer Meeting of the American Society for the Extension of University Teaching, July, 1896.

Publication.—Fragments of Roman Satire from Ennius to Apuleius. 12mo, pp. 178. American Book Co., New York, 1897.

PROFESSOR ARMSTRONG.—*Publications*.—Philosophy in American Colleges. Read before the American Psychological Association, Dec. 30, 1896, and published in *The Educational Review*, January, 1897.

Review of Höffding's Kierkegaard. *Psychological Review*, March, 1897.

PROFESSOR BRADLEY.—*Publication*.—Paraisobutylphenoxyacetic Acid (with F. Kniffen). *American Chemical Journal*, January, 1897.

PROFESSOR E. B. VAN VLECK.—*Publications*.—On the Roots of Bessel- and P-Functions. *American Journal of Mathematics*, January, 1897.

On Polynomial Solutions of Linear Differential Equations. Read before the American Mathematical Society, February, 1897.

PROFESSOR KUHN.—*Lecture*.—Alfred de Musset. Stamford, Conn., Feb. 17, 1897.

Publications.—In Warner's Library of the World's Best Literature, the articles and selections s. v. Alfieri, Ariosto, and Mediæval Bestiaries and Lapidaries.

Origin of Pennsylvania Surnames. *Lippincott's Magazine*, March, 1897.

Victor Hugo's Les Misérables. *Chautauquan*, May, 1897.

The Treatment of Nature in Dante's Divina Commedia. 12mo, pp. vi. + 208. Edward Arnold. New York and London, 1897.

Cuore di Edmondo De Amicis, edited with notes. 12mo, pp. vi. + 216. Henry Holt & Co., New York, 1896.

PROFESSOR FAUST.—*Lectures*.—Das Leben und Dichten Ludwig Uhlands, Feb. 8, 1897; and Das deutsche Volkslied, March 15, 1897, at the German Lutheran St. Paul's Church, Middletown.

Publications.—Charles Sealsfield (Carl Postl), Der Dichter beider Hemisphären. Sein Leben und seine Werke. 8vo, pp. 295. Verlag von Emil Felber, Weimar, 1897.

Charles Sealsfield's Place in Literature. *Americana Germanica*, Vol. I., No. 1, January, 1897.

Theodor Mügge, An Inquiry Concerning the Author's Biography. *Modern Language Notes*, Vol. XII., No. 2, February, 1897.

DR. BENEDICT.—*Lectures*.—A course of five lectures on the Chemistry of Foods, under the auspices of the American Society for the Extension of University Teaching, at the University of Pennsylvania, Philadelphia, Pa., in July, 1896.

DR. JUDD.—*Publications*.—Outlines of Psychology. A translation of Wundt's *Grundriss der Psychologie*, 8vo, pp. xviii. + 342. W. Engelmann, Leipzig, 1896.

Review of Max Wentscher, *Ueber physische und psychische Kausalität*. *Psychological Review*, March, 1897.

DR. TOWER.—Ueber Potentialdifferenzen an den Berührungsflächen verdünnter Lösungen. *Zeitschrift für physikalische Chemie*, July, 1896.

FACULTY LECTURE COURSE.

A somewhat extended course of lectures by members of the Faculty has been given before the College this year. The following list indicates the dates and topics:

January 19.—Professor Winchester, "General Characteristics of Robert Browning."

February 2.—Professor Winchester, "Art, Love, and Religion in Browning."

February 25.—Professor Armstrong, "Typical Eras in Skepticism."

March 2.—Dr. Starks, "Some Positive Results of Biblical Criticism."

March 16.—Professor Mead, "Viking Songs from the old Northern Edda."

March 23.—Associate Professor Faust, "German Lyrical Poetry in the Nineteenth Century."

April 8.—Dr. Paton, "Greek Sepulchral Monuments."

April 20.—Professor Rice, "German Universities."

MIDDLETOWN SCIENTIFIC ASSOCIATION.

The following subjects have been discussed at the meetings of the Association since the last report in the BULLETIN:

May 12, 1896.—"The History of the Farmington River," W. N. Rice.
 "The Effect of Very Low Temperatures on Chemical Reactivity," W. P. Bradley.
 "The Nineteenth Semi-Annual Convention of the National Electric Light Association," E. B. Rosa.

June 9.—"Studies of the Food of the Poor of New York," C. D. Woods.
 "Experimental Psychology," W. J. Shaw.

Oct. 13.—Addresses relative to the life and work of the late G. Brown Goode, the founder of the Association, W. N. Rice and W. O. Atwater.

Nov. 10.—"The Cell-Doctrine, Past and Present," H. W. Conn.

Dec. 8.—"Petroleum," W. P. Bradley.

Jan. 19, 1897.—"Röntgen Rays," M. B. Crawford.

Feb. 9.—"Explosives," F. G. Benedict.

March 9.—"Color-Vision," C. H. Judd.

April 13.—"Certain Thermo-Chemical Data in their Relation to the Dissociation Theory," O. F. Tower. "The Pueblo Indians," J. S. Judd.

"THE APOSTLES CLUB."

The Club organized two years ago by members of the Faculty representing the literary, philosophical, and historical departments, has not yet cared to adopt formally any name, but is commonly designated—from the number of its original members—as The Apostles Club. At its regular monthly meetings, throughout the year, the following subjects have been discussed:

1. The Study of Philosophy in American Colleges. Professor Armstrong.
2. The University of Copenhagen. Professor Mead.
The Money Question. Professor Fisher.
3. Professor Jellinek's Pamphlet on The Declaration of the Rights of Man, issued by the French Constituent Assembly in 1789. Dr. Farrand.
The Private Art Collections of C. Verres. Professor Van Benschoten.
4. The Ethical Situation. Dr. Starks.
5. The Life and Works of Charles Sealsfield. Professor Faust.
6. A Recent Work on Greek Religion. Dr. Paton.
7. Dante's Influence on English Poets. Professor Kuhns.
8. The *Cena Trimalchionis* of Petronius. Dr. Hayley.

JUNIOR EXHIBITION.

The annual Junior Exhibition was held in the Memorial Chapel on the evening of Thursday, April 22. The judges were Rev. Watson Lyman Phillips, D. D., of New Haven; Daniel Robinson Howe, B. A., of Hartford; and John Halsey Beach, B. A., of Hartford. These gentlemen awarded the first prize to George Wilbur Osmun, who spoke on "Keats and the Doctrine of the Beautiful"; and the second prize to George Edward Andrews, whose theme was, "The College Man and Citizenship."

THE YOUNG MEN'S CHRISTIAN ASSOCIATION.

During the past year the work of the Young Men's Christian Association has been carried on with very satisfactory results. The attendance at the regular meetings has been good, and a special interest in Foreign Missions has been developed by a Missionary Class which has met regularly on Wednesday evenings after the class prayer-meetings. The year has been marked also by the introduction of systematic Bible study, for which purpose two classes have been organized, one for Freshmen for the study of the Life of Christ, the other a general class for the study of the Life of St. Paul. Both classes have been very well attended, and to the interest thus awakened, and to a more systematic management of the business affairs of the Association, much of the success of the year is due.

The Neighborhood Committee has continued its missionary work in furnishing a superintendent and three teachers to the Sunday School of the Zion A. M. E. Church, and about twenty teachers to the various chapels in the vicinity, in addition to conducting the regular Sunday afternoon meetings at the Poor Farm.

At the opening of the College year the usual reception for the Freshman class was held, and on March 24, the Anniversary Meeting was held in the College Chapel, the speaker being Bishop W. F. Mallalieu. After the exercises a reception to introduce the new officers was held in the Gymnasium.

In view of the general financial situation, and also because it is believed that there are more urgent needs which call for the activity of the members of the Association, the Building Committee has been discontinued for the coming year. Although a Y. M. C. A. Building would undoubtedly be of considerable advantage in the work of the Association, the well-organized system of the fraternity houses makes the need of such a building less pressing at Wesleyan than in some other colleges, while the proper management of the finances of the Association and the systematic development of its numerous branches of religious work call for the most earnest effort on the part of all the members.

THE ANNUAL CONVENTION OF THE PSI UPSILON FRATERNITY.

The Sixty-fourth Annual Convention of the Psi Upsilon Fraternity met with the Xi Chapter, Middletown, on the evening of Wednesday, May 5th. The sessions continued through the next two days, closing with the banquet, which—for lack of hotel accommodations in Middletown—was given in the Foot Guard Armory Hall, Hartford, on the evening of Friday, the 7th.

The public exercises of the convention were held on Thursday evening in the Middlesex. The orator was Professor Charles F. Johnson, of Trinity College, who spoke on the question "Does the Nation Exist?" The poet, J. Kendrick Bangs, read a poem entitled "A Stygian Prophecy."

The presiding officer and toast-master at the banquet was Rev. George E. Reed, LL. D., Wesleyan '69, President of Dickinson College.

THE LIBRARY.

The depressed condition of business during the past year has interfered with the effort to secure additional subscriptions to the library endowment fund. Some subscriptions have, however, been received, the total amount pledged amounting to over \$11,000. Of this amount over \$2,500 has been subscribed by members of the Faculty, most of it by those who have the salary and the tenure of office of Professors. The committee has resumed active work and hopes to make considerable progress during the coming year.

There have been presented to the library from May 1st, 1896 to April 30th, 1897, 589 bound volumes, and 3,083 pamphlets. The principal donors were the United States Government, W. O. Atwater, '65, L. S. Bayliss, '91, W. P. Bradley, H. E. Burton, '64, M. Farrand, W. C. Fisher, L. R. Hazen, S. E. Holden, '69, J. S. Judd, '85, W. E. Mead, '81, H. W. Millison, '92, Hon. O. H. Platt, Hon. N. D. Sperry, C. T. Winchester, '69.

The Librarian wishes to obtain copies of the Catalogue prior to 1860, also the following numbers of the *Olla Podrida* to complete the library set, 1, 2, 3, 6, 12, 14, 16, 21, 27.

There is an increasing demand for genealogies and books on local history. Gifts of such books will be gratefully received.

During the past year the sum of \$29 has been received from the treasurer of the class of '94 as a payment upon the '94 subscription for the purchase of books on political economy.

Additional shelving has been provided on the third floor to be used in arranging the large collection of pamphlets and unbound periodicals which has accumulated. Duplicates reserved for exchange will also be placed on these new shelves.

The books in the library are now arranged according to the fixed shelf system. They are to be re-arranged according to C. A. Cutter's expansive classification, which is a moveable system, allowing whole classes of books to be moved from one part of the library to another without any change in the marks given to the books. A beginning has been made with the philosophical books, and the new system will be extended as rapidly as the growing work of the library will permit.

PREPARATORY SCHOOL ASSOCIATIONS.

One of the signs of an increasingly close connection between the College and the preparatory schools is seen in the formation, within the college walls, of Alumni Associations of the schools. The academies which are at present thus represented are East Greenwich, Hackettstown, Kent's Hill, Montpelier, Mount Hermon, Pennington, Poultney, Tilton, Wilbraham, and Wyoming. The annual banquet of each association is held on or near February 21, and is attended not only by the resident alumni, but also by representatives from the school. Interest in the welfare of the preparatory schools is thereby revived and old affiliations are renewed.

G. BROWN GOODE MEMORIAL MEETING.

On February 13 a meeting was held in the National Museum at Washington to commemorate the life and services of G. Brown Goode, LL. D., late Assistant Secretary of the Smithsonian Institution. For this purpose the Patriotic and Historical Societies of Washington coöperated with the Joint Commission of the Scientific Societies. The following speeches were made:

Introductory remarks by Hon. G. G. Hubbard, President of the Joint Commission; address, Dr. S. P. Langley, Secretary of the Smithsonian Institution; Goode as a Historian and Citizen, Hon. W. L. Wilson; Goode as a Naturalist, Prof. H. F. Osborn; Goode's Activities in Relation to American Science, W. H. Dall.

RECENT COLLEGE APPOINTMENTS.

CLASS.

1844. Francis Southack Hoyt, Professor of Biblical and Systematic Theology, Baldwin University.
1853. Charles Rhodes Pomeroy, Professor of Mental and Moral Science, and Dean, Puget Sound University.
1879. William Cyrus Strong, Professor of Physics, Bates College.
1882. Joseph Richard Taylor, Professor of Greek and Latin, Boston University.
1887. Joseph Chapin Rockwell, Assistant Professor in Classical Archaeology, University of California.
1887. Samuel Newton Taylor, Instructor in Physics, Purdue University.
1889. William Emory Smyser, Professor of English Literature, DePauw University.
1890. Stockton Axson, Assistant Professor of English Literature, Adelphi College.
1892. Edward Loranus Rice, Professor of Biology, Allegheny College.
1892. Alfred Ernest Taylor, Assistant in Chemistry, Cornell University.
1892. Olin Freeman Tower, Assistant in Chemistry, Wesleyan University.
1893. Frederick Smith Hall, University Fellow, Columbia University.
1893. Daniel Acker Lehman, Professor of Mathematics and Astronomy, University of the Pacific.
1893. Albert Emory Loveland, Assistant in Histology, Yale Medical School.
1894. Abraham Howry Espenshade, University Fellow, Columbia University.
1894. Charles Hubbard Judd, Instructor in Philosophy, Wesleyan University.
1894. Willis Thomas Lee, Professor of Biology and Geology, University of Denver.
1895. Ernest Ketcham Smith, Assistant Secretary of the Faculty, Wesleyan University.
1896. Louis Arthur Norris, Assistant Librarian, Wesleyan University.
1896. Edmund David Searls, Assistant in Physics, Wesleyan University.

INFORMATION WANTED.

Information concerning the present address of any of the following alumni will be gratefully received by the Editor of the *Supplement to the Alumni Record*, Professor F. W. Nicolson:

CLASS.

1836. Dwight E. Bates.
1848. John C. Clarke.
1849. James T. Fountain.
1849. Frank G. Johnson.
1849. John H. Smith.
1855. Joseph H. Sanborn.
1860. William R. Carr.

CLASS.

1860. Andrew K. Crawford.
1861. George W. Warner.
1862. Thomas F. Barnswell.
1864. Stephen A. Snow.
1865. Coleman C. Burr.
1878. Charles H. Hemstreet.

OBITUARY RECORD.

The following deaths among the alumni have been reported since the publication of the last Obituary Record:

- CLASS.
1835. Hugh Blair Jolley, b. 1 November, 1811, in Coeymans, N. Y.; d. 1 March, 1896, in Newark, N. Y.
1835. Sabura Stebbins Stocking, b. 24 June, 1810, in Glastonbury, Conn.; d. 24 May, 1896, in Jamaica, N. Y.
1838. William Hinkley Bussell, b. 4 December, 1809, in Portland, Me.; d. 9 April, 1897, in Watervliet, N. Y.
1839. Alexander Comstock Huestis, b. 16 April, 1819, in Perry, N. Y.; d. 23 January, 1895, in Fort Wayne, Ind.
1840. William Henry Harris, b. 7 March, 1820, in Sterling, Conn.; d. 25 August, 1896, in Brooklyn, N. Y.
1842. John Clough Ingalls, b. 23 June, 1808, in Sandown, N. H.; d. 28 February, 1897, in Melrose, Mass.
1844. Silas Lawrence Loomis, b. 22 May, 1822, in Coventry, Conn.; d. 22 June, 1896, in Fernandina, Fla.
1844. Charles Thomas Pooler, b. 30 August, 1822, in Brooklyn, Conn.; d. 10 February, 1897, in Deansville, N. Y.
1846. Dixon Alexander, b. 24 March, 1822, in DeKalb, N. Y.; d. 18 February, 1897, in Fayette, Iowa.
1848. Franklin Otis Blair, b. 30 November, 1822, in Blandford, Mass.; d. 14 October, 1896, in Trinidad, Col.
1849. David Benjamin Lockwood, b. 7 January, 1827, in Weston, Conn.; d. 19 January, 1897, in Bridgeport, Conn.
1850. Alonzo Jay Edgerton, b. 7 June, 1827, in Rome, N. Y.; d. August, 1896, in Sioux Falls, S. Dak.
1851. Seth Parker Holway, b. 6 March, 1833, in Warren, R. I.; d. 12 August, 1896, in San Francisco, Cal.
1852. Addison Franklin Wheeler, d. 24 May, 1887, in Chemung, N. Y.
1852. Aaron White, b. 18 September, 1824, in Kirkland, N. Y.; d. 10 April, 1897, in Cazenovia, N. Y.
1854. George Stevens, b. 4 March, 1829, in Jefferson, N. Y.; d. 1897, in Bloomington, Ill.
1855. Andrew Jackson Coe, b. 15 September, 1834, in Meriden, Conn.; d. 25 February, 1897, in Meriden, Conn.
1857. Robert Field Crowell, b. 23 April, 1830, in Ware, Mass.; d. 15 September, 1896, in Westboro, Mass.
1857. Joseph Whitney Cushing, b. 26 January, 1837, in Ashford, Conn.; d. 9 May, 1897, in Brookline, Mass.
1858. Anson Tuller Copeland, b. 15 September, 1830, in Lorraine, N. Y.; d. 21 February, 1897, in Girard, Pa.
1860. Sanford Benton Sweetser, b. 23 May, 1839, in Cliftondale, Mass.; d. 4 March, 1897, in Lawrence, Mass.
1861. John Wesley Barnhart, b. 9 September, 1833, in Marlboro, N. Y.; d. 25 January, 1897, in Tarrytown, N. Y.

CLASS.

1861. Christopher Page Flanders, b. 25 November, 1834, in Landaff, N. H.; d. 23 January, 1897, in Bryantville, Mass.
1861. John Lincoln Stuart Roberts, b. 25 December, 1839, in Boston, Mass.; d. 21 August, 1896, in Boston, Mass.
1864. Daniel Gould Harriman, b. 9 July, 1833, in New Sharon, Me.; d. 31 December, 1896, in Brooklyn, N. Y.
1869. Joseph Dame Weeks, b. 3 December, 1840, in Lowell, Mass.; d. 26 December, 1896, in Pittsburg, Pa.
1870. George Brown Goode, b. 13 February, 1851, in New Albany, Ind.; d. 6 September, 1896, in Washington, D. C.
1881. John Thomas Crook, b. 17 February, 1861, in Dublin, Ireland; d. 22 May, 1896, in Eagle Pass, Tex.
1884. Lorenzo Nickerson Johnson, b. 20 December, 1862, in Easton, Conn.; d. 27 February, 1897, in Boulder, Col.
1890. William Wellington Alexander, b. 16 January, 1864, in Harford, Pa.; d. 5 March, 1897, in Binghamton, N. Y.
1890. Robert Saul Green, b. 2 December, 1867, in Kingstown, N. J.; d. 2 April, 1897, in Denver, Col.

CALENDAR.

1897.

- June 3, Thursday, 7:30 P. M.,—Junior Prize Debate.
- June 25, Friday, 7:30 P. M.,—Freshman, Sophomore, and Junior Declamation.
- June 27, Sunday, 10:30 A. M.,—Baccalaureate Sermon, by the Rev. Bishop W. X. Ninde, D. D., LL. D.
- June 27, Sunday, 7:30 P. M.,—University Sermon, by the Rev. Henry van Dyke, D. D., of New York.
- June 28, Monday, 11:00 A. M.,—Public Awarding of Prizes.
- June 28, Monday, 2:00 P. M.,—Class Day Exercises.
- June 28, Monday, 8:00 P. M.,—Annual Meeting Board of Trustees.
- June 28, Monday, 8:00 P. M.,—Glee Club Concert.
- June 29, Tuesday, 9:00 A. M.,—Meeting of Φ. B. K. Fraternity.
- June 29, Tuesday, 10:00 A. M.,—Business Meeting of the Alumni Association.
- June 29, Tuesday, —Reunions of Classes of 1847, '72, '82, '87, '90, '94.
- June 29, Tuesday, afternoon, —Receptions by the College Fraternities.
- June 30, Wednesday, 10:00 A. M.,—COMMENCEMENT.
- June 30, Wednesday, afternoon, —Commencement Dinner.
- June 30, Wednesday, evening, —President's Reception.
- July 1, Thursday, 9:00 A. M.,—Examination of candidates for admission begins.
- Sept. 29, Wednesday, 9:00 A. M.,—Examination of candidates for admission begins.
- Sept. 30, Thursday, 9:00 A. M.,—First Term begins.

— THE —

Wesleyan University Bulletin.

MIDDLETOWN, CONN.

NOVEMBER, 1897.—No. 21.

ALL the friends of Wesleyan join in a hearty welcome to President Raymond as he again assumes the active duties of his position after a year of study and travel in Europe. Vice-President Van Vleck's administration of the affairs of the institution in the absence of the President has been wise and energetic, and marked by steady progress. Thus for the third time has the senior member of the Wesleyan faculty laid the institution under obligation for services the value of which can be best measured by his colleagues.

For the first time in the history of Wesleyan University the number of students in the entering class exceeds one hundred. This is an increase of ten per cent. over the number entering a year ago, and affords good ground for congratulation. Yet the increase of our numbers without a corresponding increase of our facilities is not an unmixed blessing. Never before has it been so evident that the buildings which were commodious enough even ten years ago are clearly inadequate to the present needs of the institution. A new recitation building will shortly be an imperative necessity.

The increase of work made necessary by our growing numbers and the subdivision of classes into manageable sections will also compel the strengthening of the teaching force in more than one department.

The evident corollary to all these and other facts that might be mentioned is that there must come to the University in the near future a largely increased endowment. The sum recently obtained from the residue of the Fayerweather estate is but a fraction of the amount required to make the equipment of the institution adequate to the present needs.

The enclosed athletic field, which has for so long a time been regarded by many undergraduate students and younger alumni as the most pressing need of the University, is rapidly assuming its final shape. Athletic interests appear now to have received so generous a recognition that other needs of the University may fairly be brought into greater prominence.

The modest sum of \$50,000, which has been named as the minimum amount for our Library endowment, still falls short by several thousand dollars. The inadequacy of the Library has so often served as a text for editorial notes in the BULLETIN that the old arguments need not be restated. But the fact remains that advanced work is impossible without more books, and that they are not forthcoming.

NOTES OF THE LAST COMMENCEMENT.

TRUSTEE MEETING.—The Annual Meeting of the Board of Trustees was held on the evening of Monday, June 28, 1897, and was continued in two sessions on the following day. Twenty-eight members were present. Hon. George G. Reynolds, LL. D., and John E. Andrus were reëlected respectively President and Treasurer of the Board. Rev. E. M. Mills, Ph. D., D. D., was elected Secretary in place of Rev. E. W. Burr, D. D., who for many years had served in this capacity but declined a reëlection.

In the absence of President Raymond the annual report upon the condition of the College was presented by the Acting-President, Professor J. M. Van Vleck. Authority was delegated to him to confer the following honorary degrees: The degree of Doctor of Divinity, upon Rev. John A. Faulkner, of Drew Theological Seminary; Rev. George B. Smythe, President of the Anglo-Chinese College, Foochow, China; Rev. Wallace McMullen, of Philadelphia; Rev. William R. Newhall, of Wilbraham, Mass.: the degree of Doctor of Laws upon Hon. Theodore E. Hancock, of Syracuse, N. Y., Attorney-General of the State of New York.

The following Trustees were reëlected: John H. Sessions, William Connell, David H. Ela, George S. Bennett, Charles L. Rockwell, George West and Azel W. Hazen. To fill the unexpired term of Mark Hoyt, deceased, George S. Coleman, of New York, was selected.

Appropriate minutes in regard to the deaths of Mark Hoyt and Rev. M. D'C. Crawford, D. D., were adopted and entered upon the records of the Board.

John E. Andrus announced that he would pay for the changes necessary to put the rear campus into condition for an athletic field. A committee consisting of John E. Andrus, Charles Scott, and Stephen H. Olin was appointed with power to make the changes.

The following appointments were made to the Board of Instruction:

Rev. Henry A. Starks, D. D., Lecturer in Ethics and Christian Evidences;
 Albert B. Faust, Ph. D., Associate Professor of German;
 James M. Paton, Ph. D., Instructor in Greek;
 Max Farrand, Ph. D., Instructor in History;
 Francis G. Benedict, Ph. D., Instructor in Chemistry;
 George H. Ling, Ph. D., Instructor in Mathematics;
 Charles H. Judd, Ph. D., Instructor in Philosophy;
 Herman W. Hayley, Ph. D., Instructor in Latin;
 Olin F. Tower, Ph. D., Assistant in Chemistry;
 William M. Esten, M. S., Assistant in Biology;
 Edmund D. Searles, B. A., Assistant in Physics;
 Alvenza I. Smith, B. A., Assistant Secretary of the Faculty;
 Charles H. Brown, B. A., Assistant Librarian;
 Samuel W. Loper, M. A., Curator of the Museum;
 Frederick W. Marvel, Ph. B., Director of the Gymnasium;
 Olin S. Blakeslee, Mechanician.

Resolutions were adopted thanking James Woolson, of Boston, for the gift of a portrait of Rev. Joseph Cummings, D. D., LL. D., former President of the University, and thanking William Hoyt for a similar gift from himself and the late Mark Hoyt of a portrait of Rev. John W. Beach, D. D., LL. D. The gift made by Theodore R. Hoyt and his brothers of a share in the Publication Fund of the New York Historical Society was also suitably recognized.

Professor Atwater was elected a member of the Board of Control of the Agricultural Experiment Station of the State of Connecticut. Prof. E. T. Merrill was granted leave of absence for the year 1898-99, subject to the approval of the Academic Council.

A new committee, consisting of Rev. J. M. Buckley, G. S. Coleman and Bishop E. G. Andrews, was appointed to visit the College the ensuing year.

ALUMNI ASSOCIATION.—The Annual Meeting of the Association was held on Tuesday of Commencement week.

Hon. Martin A. Knapp, LL. D., and William M. Ingraham, M. A., were elected representatives of the Association on the Board of Trustees. Professor J. M. Van Vleck was reelected a member of the Alumni Library Committee.

President Capen of Tufts College was introduced to the Association and made a brief address.

Rev. W. L. Phillips was appointed a committee to ascertain whether any other time than Tuesday morning of Commencement week could be found for the annual meeting of the Association.

The following officers for the ensuing year were chosen: President, Herbert Welch; Vice-Presidents, G. S. Coleman, A. M. Tallmadge, W. R. Walkley; Recording Secretary, L. O. Kuhns; Corresponding Secretary, W. J. James.

Immediately after adjournment the Association met in joint session with the Board of Trustees. Two of the three portraits needed to complete the series of portraits of former Presidents of the University were then presented to the Board of Trustees. The portrait of Rev. Joseph Cummings, D. D., LL. D., was the gift of James Woolson, of Boston, and the portrait of Rev. John W. Beach, D. D., LL. D., the gift of William Hoyt and the late Mark Hoyt. The addresses of presentation were made in behalf of the donors by Professor C. T. Winchester and Dr. James M. Buckley, and the gifts were received for the Trustees by Judge G. G. Reynolds.

THE FINANCES.—The following is a brief statement of the property of the College, according to the most recent appraisal, and of the income and expenditures for the financial year 1896-97:

Property of the University.

Invested funds and productive real estate, - - - -	\$1,105,725 00
College buildings and campus, - - - -	531,300 00
Unproductive real estate, - - - -	38,304 31
Scientific collections and apparatus, - - - -	85,255 00
Library, - - - -	45,000 00
Furniture in various College buildings, - - - -	8,760 00
Subscriptions to endowment funds, paying interest, - -	1,000 00
Cash, - - - -	27,504 17
Total, - - - -	\$1,842,848 48

Receipts from May 30, 1896, to May 31, 1897.

Students' bills,* - - - -	\$33,080 05
Interest on investments, and rents, - - - -	60,397 62
Alumni Library income, - - - -	1,296 96
Women's Dormitory, - - - -	7,080 15
Special subscriptions, - - - -	1,101 00
Mechanical Laboratory, - - - -	1,103 45
Miscellaneous, - - - -	970 67
Balance on hand, May 30, 1896, - - - -	245 73
Balance advanced by Treasurer, May 31, 1897, - - - -	2,858 77
Total, - - - -	\$108,134 40

Expenditures from May 30, 1896, to May 31, 1897.

Salaries, - - - -	\$57,692 50
Fuel, light, water, insurance, - - - -	5,311 40
Repairs and improvements, - - - -	7,141 71
Women's Dormitory, - - - -	5,749 27
Departmental appropriations, - - - -	3,476 42
Library, - - - -	2,609 84
Janitorial service, - - - -	4,171 55
Aid to students—tuition, - - - -	12,147 50
Interest, annuities, and scholarships, - - - -	2,785 87
Printing, postage, Catalogues, Bulletins, etc., - - - -	2,740 26
Miscellaneous, secretarial assistance, Commencement expenses, prizes, etc., - - - -	4,308 08
Total, - - - -	\$108,134 40

* Inclusive of \$12,147.50 tuition remitted.

APPOINTMENT TO THE FACULTY.

HERMAN W. HAYLEY, elected Instructor in Latin, received the degree of B. A. from Amherst in 1887. He studied classical philology in the Graduate Department at Harvard from 1887-1890, holding a Morgan Fellowship during the last two years. In 1890 he received the degree of Ph. D. The following year was spent in Germany in study at Leipzig and Berlin, as Rogers Fellow of Harvard. Dr. Hayley was appointed Instructor in Latin at Harvard in 1891, and promoted to the position of Tutor in 1893. In 1896 he gave up this position to accept an appointment as an assistant in the Harvard Library, where he remained until last February, when he resigned to accept the position at Wesleyan.

Dr. Hayley's publications are as follows: The Domestic Position of Woman in Aristophanes, Harv. Stud. in Class. Philol. Vol. I.; Quaestiones Petronianae, the same, Vol. II.; The *νότατος κατακτός*, the same, Vol. VI.; *Varia Critica*, the same, Vol. VII.; An Introduction to the Verse of Terence, Ginn & Co., Boston, 1894, and other papers and reviews.

He has now in press a critical edition of the *Alcestis* of Euripides.

DEPARTMENT NOTES.

LATIN.—The department is fortunate in being able to retain the services of Dr. Hayley, who so ably filled the temporary vacancy during the second half of last year. The restored health of Associate Professor Nicolson has also enabled him to resume six hours per week of class-work in addition to his duties as Secretary of the Faculty. This increase of teaching force has made possible the much needed division of the Freshman course into three divisions instead of two, and has given opportunity for a very desirable rearrangement of the work in general.

A very welcome increase in the number of students electing the rather severe course in Prose Composition has made it necessary to divide the class, and Professor Merrill relieves Dr. Hayley of the care of one division.

The only new courses given the present year are in Rapid Reading and in Roman Literary Criticism, both by Professor Merrill. The course in Roman Satire has, however, been extended to occupy the entire year, instead of a half-year only, as for the last few years. In accordance with the preference of a number of students, the course in Roman Private Life is given this year in place of the course in Roman Topography.

In view of the contemplated leave of absence of Professor Merrill for the year 1898-99, he has offered to give the current year any of the courses which were scheduled for next year, but might be omitted then by reason of his absence. A similar arrangement is promised for the year after his return. The only courses that may be expected next year are those numbered I., II., III., IV., V., VIII., XI., and XII. in the current list of Courses of Instruction.

The Sherman prize is awarded the present year to that member of the Freshman class who shall excel in Latin. The examination will be held toward the end of the academic year, and will consist of four parts:

1. The submission in writing of a previously prepared translation into English of Livy XXII. 45-49 (the description of the battle of Cannae, beginning with the words *dum altercationibus* and ending *quingenti dicuntur*); especial scrutiny will be made of accuracy of rendering and of literary form:
2. A somewhat searching examination upon the subject-matter of the above mentioned passage, including its grammar and antiquities:
3. The translation at sight into English of a passage from Plautus or Terence, with especial attention to accuracy of rendering combined with excellent literary form:
4. An examination upon the subject-matter of the passage set for sight-translation, designed to test the general attainments of the candidates in grammar and antiquities.

The examination for the Phi Beta Kappa Prize for 1897-98 will probably be held on June 4, 1898, and will consist of the following parts:

1. Translation at sight of Latin prose and poetry into English:
2. Translation at sight of English narrative prose into Latin prose:
3. The submission of a previously prepared translation into Latin prose of the paragraph in Macaulay's History of England, Chapter 2, beginning "It is creditable to Charles's temper," and ending "could obtain an audience."
4. A general paper of questions designed to test the candidate's knowledge of Latin grammar, and of Roman antiquities, mythology, and political and literary history.

While competition for the prize under these conditions is limited to no class of students, the passages and questions set will be graded to the presumed capacity of those who have advanced no further than the Sophomore year in Latin.

Furthermore, the examination in parts 1 and 4 for this prize will be identical with the examination in Latin for Preliminary Honors in Classics for 1897-98, and need not be repeated by candidates for such Honors. See the announcement on that subject made elsewhere in this BULLETIN.

GREEK.—In place of the course in the Poetics of Aristotle, which was announced for this year, there has been substituted a course of readings from the less difficult works of various Greek authors. The chief object of the course is to read rapidly a larger amount than can be covered in an ordinary course, and for this reason only those students who have already attained high rank in Courses I. and II. are admitted.

For some years the Spinney Prize for excellence in Greek has been awarded according to the result of a special examination, which while including a part of the work in II. Greek, also required a large amount of reading in addition

to the regular course. This year the conditions will be somewhat changed, and the special examination will cover the following subjects:

1. Translation at sight of Greek prose and verse.
2. A general paper, including questions on Greek grammar, antiquities, mythology, and political and literary history.
3. The Euthyphron of Plato.

The examination in the first two subjects is intended to test the thoroughness with which the student has performed the work of Freshman and Sophomore years. The third subject is the only one requiring special preparation, and the examination will test the thoroughness with which both language and subject-matter have been mastered.

The examination in subjects 1 and 2 will be identical with the examination in Greek required for Preliminary Honors in Classics, and need not be repeated by candidates for such Honors.

See the announcement on that subject on page 8 of this BULLETIN.

ENGLISH LANGUAGE.—The increase in the number of students has made necessary a division of English Language, I. B into two sections.

The class in Sophomore Rhetoric has for the first time been divided this year into two sections. Opportunity is thus afforded for more effective criticism of written themes than has heretofore been possible.

The course in Gothic has this year been thrown open for the first time to Juniors who have taken Course IV., but it is made a supplementary course to the one in Old English poetry (Course VIII.).

ENGLISH LITERATURE.—The weekly exercise in debate which has been required of the Senior Class for a number of years has been given up, and in its place an elective class for debate has been formed. The number of this class is limited to twenty: this year it numbers fifteen. It meets once a week, two members of the class being appointed to conduct the debate at each meeting. These gentlemen must prepare, at least one week before the debate, a formal brief of their argument, with lists of authorities. These briefs are examined and corrected by the Professor of the department, and after revision are posted four days before the debate.

PSYCHOLOGY.—The special subject chosen for the advanced course in experimental psychology is the perception of space, particularly of visual space. A Wheatstone stereoscope has been provided and other apparatus is being made for use in this course.

Several important additions have been made to the apparatus of the psychological laboratory. A Helmholtz's rotation apparatus will be used as the motor for the chronometric and chronographic experiments. A sphygmograph from Verdin and a plethysmograph from Einier and Amend will make it possible to demonstrate the physiological effects of affective mental states.

GEOLOGY.—The advanced course in Geology is this year catalogued as two courses (II. and III.), either of which may be elected independently. The former deals with dynamical and structural geology, the latter with historical geology and paleontology. The work this year will consist, more largely than in previous years, of lectures and reports by members of the class on special topics, the work on the text-book being made subordinate. Scott's Introduction to Geology is followed as a general outline of the subject.

The course in Mineralogy is also divided (V. and VI.). The former, treating of crystallography and optical mineralogy, may be elected by students making a specialty of physics and physical chemistry, who do not care for the course in descriptive mineralogy.

PRELIMINARY HONORS IN CLASSICS FOR 1897-98.

The general requirements for Preliminary Honors in Classics are stated on p. 87 of the Catalogue for 1896-97: but for "either II. or III. Latin" should be read "any two of Courses II.-V. Latin." The examinations for these Honors for the current year will be identical with the divisions numbered 1 and 4 in the examination for the Phi Beta Kappa Prize, and those numbered 1 and 2 in the examination for the Spinney Prize, as announced in this BULLETIN. In Political History the questions set will be confined to the periods covered by the authors read in the prescribed courses, and a choice of alternatives will be allowed. A similar course will be followed, as far as possible, in the subjects of Grammar, Mythology, and Antiquities. The examination is upon subjects, and not upon particular books; but candidates who wish to extend their reading beyond the limits of the prescribed courses will find the following manuals brief and good: Gow's Companion to the School Classics, Harrington-Tolman's Greek and Roman Mythology, Jebb's Primer of Greek Literature, Wilkins' Primer of Roman Literature.

RECENT GIFTS.

Attention is called in a separate note to the gift made by John E. Andrus of an enclosed athletic field.

Through the generosity of Frank S. Jones a new and handsome pipe organ is to be provided for the Upper Chapel. Other changes will at the same time be made. The partition which separates the platform of the upper chapel from the small room in its rear is to be removed and the organ erected in the additional space thus gained. The chapel will also be reseated, and further improvements are contemplated. The organ is to be constructed by Charles S. Hutchins of Boston, and the general improvements are to be made under the direction of J. Cleveland Cady of Cady, Berg & See, architects, New York.

The gift of a share in the Publication Fund of the New York Historical Society is reported under the Library Notes. The givers are Theodore R. Hoyt, '84, and his brothers, Edward C., George D. and Walter S. Hoyt.

Since the last issue of the BULLETIN the remainder of the bequest of \$100,000 in the will of Daniel B. Fayerweather has been paid into the college treasury, and in addition \$85,000 from the residual estate. It is expected that the latter sum will be increased to \$150,000 upon the conclusion of the litigation over the will.

THE LIBRARY.

Since the publication of the last BULLETIN the sum of \$1,376 has been pledged to the Library Endowment Fund. The total amount subscribed to date is about \$13,000. The first installment of library subscriptions was due October 1st. During the past five months subscriptions amounting to \$1,500 have been paid.

Two recent gifts are worthy of special note. The sons of the late Oliver Hoyt have transferred to the University the certificate of the New York Historical Society for one share in the Publication Fund. There have already been published and distributed to certificate holders, twenty-four volumes of valuable historical material. Through the efforts of Arthur H. Merritt, '89, Professor in Trinity College, Durham, N. C., the Library has received a set of Colonial and State Records of North Carolina in fourteen folio volumes.

During the summer vacation the Librarian's Office was improved by making it one-third larger and by cutting a doorway through into the main Library.

THE MUSEUM.

In the latter part of last fall term, the Museum received from the Middlesex Quarry Company the gift of a slab of sandstone bearing a remarkably fine series of tracks (six in number) of the Triassic Dinosaur, *Otozoum*. The specimen, which is about eleven feet in length, has been placed in the lower vestibule of Judd Hall. It is one of the finest specimens of fossil footmarks in the collection. At the same time the Middlesex Quarry Company presented to the Museum a block of sandstone showing two faults. This block was sawn transversely to the planes of stratification and those of faulting, the work being done gratuitously by the Connecticut Steam Brown Stone Company. As thus prepared, it affords a remarkably fine illustration of a point in structural geology.

In the winter term, three remarkably perfect teeth of the mammoth (*Elephas primigenius*) were received from Mr. James Terry, of New Haven. With one of the teeth a portion of the jaw is also preserved. It is interesting, as illustrating the wide distribution of this species, that one of the specimens is from Alaska, one from the vicinity of Puget Sound, and one from Texas.

In the last term, a very valuable collection of the rare Moqui and Zuni pottery was received as a donation from the Smithsonian Institution.

A collection of the rocks of the United States, numbering 156 specimens, was received from the United States Geological Survey. The collection is classified according to the system adopted by the geologists of the Survey, and is provided with printed labels. It will not be blended with the general lithological collection of the college, but will be put on exhibition as a special series.

A collection of gems has been arranged to illustrate one of the economic uses of minerals. Some choice specimens for this collection have been taken out of the general mineralogical collection. Others are recent accessions. A suite of very interesting specimens was presented by Tiffany & Co., of New York, at the request of Mr. George F. Kunz. Donations have also been received from Ryan, Barrows & Parker, and Clark & True, of Middletown; J. H. Durant, of New Haven; and the Parker & Davis Co., and J. J. Dunlap, of Bridgeport. Specimens of artificial imitations of various gems are also included in the collection.

During the past summer, a re-arrangement has been made of the ethnological collections, whereby space has been secured in the Museum for placing on exhibition the Crittenden collection of Indian relics from the burial mounds in East Tennessee, to which reference was made in the BULLETIN a year ago. This collection still remains the property of Mr. Crittenden, through whose public spirit it was acquired. It is earnestly hoped that the money necessary for the purchase of the whole, or at least of a considerable part of the collection, may be speedily secured from generous friends of the college.

During the summer, a case has been designed and built by the Curator, to illustrate the mode of occurrence of stalactites and stalagmites in caverns. The case, in fact, represents a section of a cave, being floored with stalagmite, while stalactites hang from the roof. Some of the specimens of stalactites and stalagmites used in the arrangement of this case were previously in the possession of the college; but a considerable part of them are a recent donation from Mrs. T. R. Pickering, of Portland, whose late husband is well remembered as one of the most generous donors to the Museum in former years.

The stalactite case stands near the northwest corner of the lower hall of the Museum. The symmetry of arrangement of the hall has been preserved by the erection of a case of similar form near the southwest corner. This case is at present filled with Indian pottery from various parts of North and South America, including the collection of Moqui and Zuni pottery above mentioned.

A fine meteorite, being one of the largest pieces from the famous meteoric fall near Cañon Diablo, Arizona, was purchased during the summer, and now stands on a pedestal in one of the alcoves of the Museum. The specimen weighs 376 pounds, and cost \$100. The money was contributed by twenty of the citizens of Middletown, in response to the appeal of the Curator.

Since the opening of the fall term, by the courtesy of Mr. E. Woodruff, of Guilford, the Curator has done some blasting on land belonging to Mr. Woodruff, with the result of obtaining some unusually fine specimens of iolite. The iolite from that locality is not in distinct crystals, like that from the locality long famous in Haddam; but the iolite from Guilford is remarkable for its fresh and unaltered condition, and consequent beauty of color, while nearly all the Haddam iolite is more or less hydrated.

THE NEW ATHLETIC FIELD.

For some time the undergraduates and many of the Alumni have felt that the athletic interests of Wesleyan required better accommodations than were furnished by the old grounds. The foot-ball and base-ball fields were uneven, and the running track was far from adequate, even for training purposes, while the open position of the back campus left all contests in plain view of many who had paid no admission fee. Previous issues of the BULLETIN have shown that the subject has occupied the attention of the trustees, alumni and students, but the large cost and the difficulty of finding a suitable place for an enclosed field near the college have hitherto prevented action. That a new field which will be amply sufficient for Wesleyan teams is now assured, is due to the generosity of Mr. John E. Andrus, who has assumed the expense of necessary alterations on the old field.

In accordance with the new plans, the old gymnasium has been moved to a point southwest of the transit house, and the back campus has been leveled so as to give an open field extending to Mt. Vernon Street on the west, and Wyllys Avenue on the north. This work has made necessary the cutting away of the elevation at the south end, and a slight raising of the level near the Fayerweather Gymnasium. Owing to the wet summer only the grading and sowing of the new field has been completed, but it is hoped that it will be in suitable condition for use before the end of the base-ball season next spring.

It is proposed to place the new diamond in the southwest corner of the field (the old diamond occupied the northeast corner), with the grand stand on the west side, parallel to Mt. Vernon Street. The foot-ball field will also be laid out along the western side, partly covering the diamond, and both fields will be surrounded by a quarter-mile oval cinder track. This arrangement of both foot-ball and base-ball fields inside the track is followed on most of the more recent college athletic grounds.

Although all the details are not yet settled, it is not likely that any radical departure from these plans will be made.

The new field will be enclosed on the north and west by a high fence, and when match games are to be played, a temporary screen will be erected on the side toward the college buildings. It is probable that this measure will do much to improve the financial condition of the various athletic organizations.

WHY MEN COME TO WESLEYAN.

The topic "Why I came to Wesleyan" was assigned to freshmen last year for one of their compositions, and their essays on that subject have been submitted to me for examination. I have gathered from them some facts which may be of interest to the alumni and friends of the college; it seems to me also that the investigation suggests certain directions in which efforts might well be extended for bringing students to Wesleyan in the future.

My examination covers the essays of fifty-eight of the seventy-four men in the class. A certain number of the students who come here are, to use a fraternity phrase, "born" Wesleyan men. Five of last year's freshmen are sons of Wesleyan graduates, one of them being the class baby. Several others have relatives among the alumni; one of them can point in the Alumni Record to the names of his father, grandfather, and numerous uncles and cousins.

The personal influence of relatives and friends is of great importance in determining a man's choice of a college. The fact that they had friends already in Wesleyan had its weight with seven of the writers; eleven others were influenced by graduates of the college holding positions as teachers in their preparatory schools. Alumni outside the schools were successful in eight other instances in turning men in this direction. Five members of the college faculty are mentioned by name as having been instrumental by their lectures before various Methodist preparatory schools in aiding the decisions of eight members of last year's class.

In many cases where no personal influence was brought to bear, the general reputation of the college seems to have had much weight. No less than twenty-five of the writers claim to have been attracted by the reputation for scholarship of the Wesleyan faculty. The high standard of scholarship upheld by the college is mentioned by ten men, one adding that a consideration with him was that he knew others who did not enter for fear of not standing well in their classes. Eight men were attracted by the course of study, as laid down in the catalogue; a number of departments receive particular mention as having impressed readers of the catalogue with their strength. The general reputation of the alumni is noted in six of the essays as a motive in choosing this college, one writer having noticed that Wesleyan men can always get good positions and fill them well, and another having heard that her graduates stand high in the estimation of teachers' agencies. Fourteen men were influenced somewhat by the athletic record of the college, and the new gymnasium and even required gymnastics are instanced as an attraction in several cases.

The social life at Wesleyan seems to have attracted a considerable number. Six men make particular mention of this element in their choice, four others emphasize the democratic spirit which prevails among the students here, while as many as twenty lay stress upon the fraternity system, which is claimed by many of the writers to be almost ideal. Only one man expresses any doubt on this point; he is of the opinion that the fraternities "may be prejudicial to the best college life by fostering feuds."

Financial considerations are not dwelt upon as much as might be expected. Wesleyan has the reputation of being a poor man's college, yet only four men state that their choice was influenced by the fact that they could secure a tuition scholarship. Six others intimate that the low rate of expenses had something to do with their coming here, while three point to the relatively large endowment of the college as a factor in their choice.

Some of the most interesting passages in the essays are those which give the writers' estimate of Wesleyan as contrasted with other colleges which they may have had intentions, more or less fixed, of entering. Twelve other colleges are named, several of them more than once. Without going into details, a few general reasons may be given which inclined men to Wesleyan in preference to other colleges. Twenty members of the class preferred a small to a large college. Some reasons given are that in a small college a student enjoys more intimate associations with the faculty, that he is almost from the beginning of his course under the personal charge of professors instead of being confided to the care of tutors for a year or two, that college life is more attractive in a small college, that there is more incentive to work, and that, expenses being lower than in a large college, a poor man has a better chance. Only one writer considers the smallness of the college a disadvantage.

The location of the college appealed to fourteen men; three came because it was near home and six because it was some distance away. Thirteen chose Wesleyan in preference to another college because of its Methodist influences, several being sons of Methodist ministers and others intending to enter the Methodist ministry. One man entered in spite of its being a Methodist college.

Perhaps the most striking fact brought out by an examination of these papers is that sixteen of the writers attribute their choice of Wesleyan to the fact that they were induced to visit the college during their preparatory course. Various considerations affected them on the occasion of their visits. Nearly all were taken with the location of the college, and the beauty of its campus; the fraternity system was seen at its best by the visitors who enjoyed a few days' hospitality at one of the club houses; the general tone of the students, their enthusiastic interest in their college work, and their ambition in athletics, all had their effect on the visiting "preps." Five members of last year's class attended the college banquet last February, and were agreeably impressed on that occasion; another was influenced by the favorable report given by a school friend who was sent as a delegate.

The chief impression formed by reading these essays is that in the matter of influencing a man to a given college nothing can be compared in importance with the personal efforts of relatives and friends. A second inference would seem to be equally true, that if a prospective student can be induced to visit Middletown, his choice of a college is thereby practically determined. The custom begun a few years ago of holding the annual meeting of the preparatory school clubs, to which delegates from the schools are invited, the evening before the college banquet on Washington's Birthday, seems from the facts above reported to

have been emphatically a move in the right direction. It remains for the alumni and undergraduates who are interested in the growth of the college to devise still further plans for exerting in similar ways that personal influence upon students in preparatory schools which has been proved to be so efficient in the past.

FRANK W. NICOLSON.



CALENDAR.

1897.

- Sept. 30. Thursday,—College year began.
Nov. 24. Wednesday,—Thanksgiving Recess will begin.
Nov. 28. Sunday,—Thanksgiving Recess will end.
Dec. 23. Thursday,—Christmas Recess will begin.

1898.

- Jan. 4. Tuesday,—Christmas Recess will end.
Jan. 27. Thursday—Day of Prayer for Colleges.
Feb. 7. Monday,—Feb. 19, Saturday,—Mid-year Examinations.
Feb. 22. Tuesday,—Washington's Birthday, a holiday.
April 6. Wednesday,—Spring Recess will begin.
April 12. Tuesday,—Spring Recess will end.
June 29. Wednesday,—COMMENCEMENT.



— THE —
Wesleyan University Bulletin.
MIDDLETOWN, CONN.

JUNE, 1898.—No. 22.

THE issue of the present BULLETIN has been delayed somewhat beyond the usual time of publication, with the hope of including an account of possible extensive changes in the curriculum. But as the matter is still under consideration, the details cannot yet be presented to the public.

The present collegiate year has been comparatively uneventful, and hence there is little to record, except that the work in each department has steadily progressed. Some hope had been expressed that the long-delayed Library Endowment Fund would this year be completed. That hope is not yet realized, but there seems to be good reason to believe that in the near future the Library will receive the aid it so imperatively needs. In the course of the year several important gifts have been made to the Museum. Memorial Chapel has been redecorated and refitted with upholstered pews and a handsome organ. As a necessary result of the changes in the Chapel the morning devotional exercises were suspended throughout the second term.

The recent call for volunteers to the National Guard met with a quick response from the student body. Eleven men have been accepted, and a larger number are ready to enlist in the event of a more pressing emergency. Special concessions have been made by the Faculty in favor of enlisted men in the graduating class. Undergraduates who have enlisted will be allowed to resume their college work under as advantageous terms as possible.

The University sermon at the coming Commencement will be delivered by Rev. S. Parkes Cadman, of the Central Metropolitan Temple, New York City.

In order to meet a demand which has been felt for several years, a course affording opportunity for the systematic study of the Bible will be given next year. The details will be found in the Department Notes.

TRUSTEE MEETING.

An adjourned meeting of the Board of Trustees of Wesleyan University was held in New York City, February 21, 1898, with nineteen members present.

A resolution was passed thanking Professor J. M. Van Vleck for his services as Acting-President in the absence of President Raymond during the college year 1896-97.

The following appointments were made on the Board of Instruction:

Rev. Henry A. Starks, D. D., Lecturer in Ethics and Evidences of Christianity, for one year;

Edward B. Van Vleck, Ph. D., Professor of Mathematics;

James M. Paton, Ph. D., Associate Professor of Greek, for three years;

Albert B. Faust, Ph. D., Associate Professor of German, for three years;

Max Farrand, Ph. D., Associate Professor of History, for three years.

Rev. J. W. Lindsay and Rev. S. F. Upham were appointed a committee to prepare and present at the next meeting a suitable minute upon the decease of Rev. William Rice, D. D.

A communication was received from the Wesleyan Young Alumni Club of New York, asking that the new athletic grounds at Wesleyan be called the Andrus Field. This petition was granted.

DEPARTMENT NOTES.

GREEK.—Courses IV., Greek Drama, and XI., Greek Literature, will be given next year in place of Courses V. and X. As Plato is now read in Freshman year, Demosthenes' Oration on the Crown will be read during the first half-year in II. Greek. A one-hour elective course in Theocritus and Greek Bucolic Poetry will be offered by Dr. Paton. This course will be open to those who have taken II. Greek and have received the consent of the instructor.

GERMAN.—Courses IV., VI., VII., and VIII. will be omitted in 1898-99. Course V., Goethe and Schiller, will be given twice, counting as three times, a week through the year. The class will study the life and works of Goethe and Schiller, and read Goethe's Faust, Parts I. and II. (edition Thomas), and Schiller's Wallenstein (three parts).

ROMANCE LANGUAGES.—Hereafter the class in I. French will be divided into two divisions. In consequence of the increase of hours made necessary by this division, the courses in I. and II. Italian, and in V. and VI. French, will be withdrawn.

ENGLISH LANGUAGE.—A course of rapid reading in early English authors, including selections from Chaucer's *Canterbury Tales* and early English ballads, specimens of the early English drama, and of Malory's *Morte Darthur*, with some reference to later literature, will probably be offered next year. This course will be open to all Juniors, without reference to previous courses in the department, and will be given in the second half-year. One hour (counting as two hours) a week.

HISTORY.—The half-courses on Governments (VII. and VIII.), will be made full courses and will be given hereafter in alternate years. Course VII., on European Governments, will be given in 1898-99. In the Historical Seminary the subject for 1898-99 will be The Administrations of Washington and John Adams.

ETHICS.—Course III., Theism, will be given two hours a week during the second half-year. It will be open to those who have taken Courses I., II., and any three of Courses IV.-VII. in Philosophy. A new course (V.) on the English Bible will be given twice a week through the year by Dr. Starks.

CHEMISTRY AND PHYSICS.—Reference has been made in previous BULLETINS to experiments with the respiration calorimeter, which has been in process of development in the chemical laboratory during several years past. The results of the experiments have been very gratifying. The purpose of the inquiry is two-fold. Expressed in abstract terms it is to study the application of the laws of the conservation of matter, and especially the conservation of energy in the living organism. The practical application is in the obtaining of more definite knowledge than we now have as to the ways in which food is used in the body. It is the common belief that the law of the conservation of energy applies in the organic as well as in the inorganic world, and that the transformations of energy in the living organism occur in obedience to this law. The absolute demonstration of the principle, however, has not yet been reached, though important advances toward it have been made in late European researches. The experiments here during the past year have brought results which come very near to such demonstration. These experiments show more conclusively than any previous ones have done that as the food is consumed in the human body its potential energy is transformed into heat and muscular power in such ways that the body makes use of the energy in proportion to the actual amount of energy in the food. The differences between the potential energy of the food burned in the body and the amounts of kinetic energy in the heat given off from the body and in the external muscular work done by the man under experiment have, in some of the trials, been not over one per cent. of the whole.

With an apparatus capable of such accurate measurements, and with the law of the conservation of energy so well established, it is possible to conduct experiments of much practical as well as scientific interest. At present the nutritive values of different food materials, the amounts of food needed for the support of the body and the relation between muscular work and the food required are special subjects of study.

Another subject of experiment is the nutritive value of alcohol. The results obtained confirm the results of previous experiment in showing that alcohol is actually burned in the body as is the case with ordinary food materials. They indicate further that when the alcohol is so burned its potential energy is made available to the body for sustenance and for muscular work as is the case with starch, sugar, and other ingredients of our ordinary food. The inquiry in this especial direction is carried out under the auspices and with the pecuniary support of the Committee of Fifty for the Investigation of the Drink Problem, although part of the expense has been defrayed by an appropriation by the Trustees of the Elizabeth Thompson Fund.

Otherwise the chief expense is borne by the U. S. Department of Agriculture and by the Storrs Experiment Station, as these researches form a part of those prosecuted under the direction of Prof. W. O. Atwater, as the Special Agent of the former and the Director of the latter. The respiration calorimeter experiments have been conducted with the coöperation of Prof. Rosa, of the Department of Physics.

In place of the course in Chemical Physics (X.) a course of lectures on the Synthesis and Constitution of the so-called Aniline Colors will be given by Dr. Benedict twice a week during the second half-year, elective for those who have taken Course V. during the first half-year.

Following is a list of the recent gifts to the illustrative collections of the chemical department, some of which are of considerable pecuniary as well as scientific value:

Carborundum.—The Carborundum Co., Niagara Falls, N. Y.

Dye Stuffs.—Wm. J. Matheson & Co., Ltd., Front Street, New York, N. Y.

Explosives.—E. I. Du Pont de Nemours & Co., Wilmington, Del. The Atlantic Dynamite Company, of New Jersey.

Smokeless Powder.—The U. S. Government Torpedo Station at Newport, R. I., through Frederick Kniffen, M. S., '95.

Soap.—The Jabesh Harris Manufacturing Co., Buffalo, N. Y., through A. J. Harris, '96.

Russian Petroleum Products.—Nobel Naphtha Production Co., Baku, Russia.

FACULTY LECTURES AND PUBLICATIONS.

PROFESSOR RICE.—*Lectures*.—Recent Phases of Thought in Apologetics. Summer School of Theology, Ocean Grove, N. J., Aug. 5, 1897; Itinerants' Club of New York Conference, Middletown, N. Y., Oct. 6, 1897; Hamilton Theological Seminary, Hamilton, N. Y., Feb. 16, 1898.

The Credibility of Miracle. Summer School of Theology, Ocean Grove, N. J., Aug. 6, 1897; Itinerants' Club of New York Conference, Middletown, N. Y., Oct. 6, 1897; Hamilton Theological Seminary, Hamilton, N. Y., Feb. 17, 1898; New York East Conference, Brooklyn, N. Y., April 1, 1898.

A Suggestion in regard to the Theory of Volcanoes. Section E of American Association for the Advancement of Science, Detroit, Mich., Aug. 12, 1897.

The Passing of a Crisis. Fall examinations of New York East Conference, Brooklyn, N. Y., Nov. 9, 1897.

The Physical Geography of Connecticut. State Normal and Training School, Willimantic, Conn., Dec. 3, 1897.

The Geographical Effects of the Glacial Period. State Normal and Training School, Willimantic, Conn., Feb. 5, 1898.

The Yellowstone National Park. Allegheny College, Meadville, Penn., Feb. 12, 1898.

The Epoch of Evolution. Bloomfield, Conn., Feb. 23, 1898.

The Place and Function of the High School in the Educational System of the State. Association of Classical and High School Teachers, Hartford, Conn., Feb. 26, 1898.

Evolution. Two lectures. University Extension Centre, Sing Sing, N. Y., March 3, 10, 1898.

The Alternative—Christianity or Agnosticism. Presbyterian Union, Newark, N. J., April 11, 1898.

Publications.—[The Work of the Smithsonian Institution in] Geology and Mineralogy. *The Smithsonian Institution, 1846-1896*. Washington, 1897.

Review of Russell's "Volcanoes in North America." *Science*, Jan. 7, 1898.

Revised Text-book of Geology. By James D. Dana. Fifth edition, revised and enlarged. Edited by William North Rice. American Book Co., New York, Cincinnati, Chicago, 1897.

Dissection in Schools. *Christian Advocate*, May 5, 1898.

PROFESSOR ATWATER.—*Lectures.*—The Development of Experiment Stations, The Connecticut Board of Agriculture, December, 1897.

The Nutrition of Man. Cazenovia Seminary, New York, April, 1898.

Publications.—Preliminary Investigations on the Metabolism of Nitrogen and Carbon in the Human Organism (with C. D. Woods and F. G. Benedict). *Bulletin No. 44 of the Office of Experiment Stations*. U. S. Department of Agriculture, 1897, pp. 64.

A Digest of Metabolism Experiments (with C. F. Langworthy). *Bulletin No. 45 of the Office of Experiment Stations*. U. S. Department of Agriculture, 1897, pp. 434.

Articles in the *Annual Report of the Storrs Experiment Station for 1898*.

How Food is Used in the Body. Experiments with Men in the Respiration Apparatus. *Century Magazine*, June, 1897.

PROFESSOR WINCHESTER.—*Lectures.*—Two lectures before the Summer School of Theology, Ocean Grove, N. J., Aug. 7 and 8. Itinerants' Club of New York Conference, Middletown, N. Y., Oct. 7 and 8.

Six lectures before the Brooklyn Institute, Oct. 9–Nov. 7, on English Poetry from 1789 to 1832.

Five lectures in Wells College, Nov. 19–27.

Lecture before the Wesleyan Club of Michigan University, Dec. 1, on the Bible as Literature.

Six lectures before the New Haven University Extension Society, Jan. 20-Feb. 24, on Six Plays of Shakspeare.

Three lectures before the Chautauqua Assembly, in Binghamton, N. Y., Feb. 15-17.

Single lectures in Vassar College, Mt. Holyoke College, in Norfolk, Va., Wilkes-Barre, Penn., Springfield, Mass., Stamford, Conn., and other places.

Address, "Narrow Methodism or Broad?" before the Boston Methodist Social Union, April 16. Printed in *Zion's Herald*, May 4.

Publications.—The following volumes have appeared during the year in the Athenæum Press Series of English Classics, under the editorial direction of Professor G. L. Kittredge, of Harvard, and Professor Winchester:

Wordsworth. Edited by Professor Dowden, of Dublin University.

Specimens of the Pre-Shaksperian Drama. Edited by Professor Manly, of Brown University.

Selections from Malory's *Morte Darthur*. Edited by Professor Mead, of Wesleyan University.

Burke's Speech On Conciliation with America. Edited by Professor Lamont, of Brown University.

Gibbons's Memoirs. Edited by Professor Emerson, of Western Reserve University.

Selections from Shelley. Edited by Professor Alexander, of the University of Toronto.

PROFESSOR ARMSTRONG.—*Lecture.*—Constructive Forces in Recent Thinking. Middlesex Congregational Association, Clinton, Conn., June 1, 1897.

Publications.—Review of James's "Will to Believe." *Psychological Review*, September, 1897.

Theism and Contemporary Science. *The Independent*, Sept. 23, 1897.

Typical Eras of Scepticism. *Methodist Review*. September-October, 1897.

German Christmas Hymns. *The Independent*, Dec. 13, 1897.

Contributions to the Third Edition of Falckenberg's *Grundriss der Geschichte der neueren Philosophie*, Leipzig, 1898.

PROFESSOR MEAD.—Color in Old English Poetry. Paper read before the Modern Language Association of America, Philadelphia, Dec. 28, 1897.

Publications.—Selections from Sir Thomas Malory's *Morte Darthur*, edited with Introduction, Notes, and Glossary. Ginn & Co.: Boston and London, 1897, pp. lxii. + 348 (Athenæum Press Series).

Review of Windle's "Life in Early Britain." *Journal of Germanic Philology*, Vol. I., No. 4.

PROFESSOR NICOLSON.—*Publication.*—The Saliva Superstition in Classical Literature. *Harvard Studies in Classical Philology*, viii., 23-40.

PROFESSOR E. B. VAN VLECK.—On Certain Linear Differential Equations of the Second Order allied to Hermite's Equation. Paper read at the Summer Meeting of the American Mathematical Society, Toronto, Aug. 17, 1897.

On the Polynomials of Stieltjes. Paper read before the American Mathematical Society, New York, April 30, 1898.

Publication.—Review of Kiepert's "Differential-und Integral-Rechnung." *Bulletin of the American Mathematical Society*, July, 1897.

PROFESSOR KUHN'S.—*Lecture.*—Dante's Influence on English Literature in the 19th Century. Dante Club, of Windsor, Conn., April 27, 1898.

Publications.—The Divine Comedy of Dante. Translated by Henry F. Cary. Edited with Introduction and Notes. T. Y. Crowell & Co., New York, 1897. Paul et Virginie. Edited with Notes. H. Holt & Co.

Dante as a Tonic for To-day. *Dial*, Sept. 1, 1897.

Dante's Influence on Milton. *Modern Language Notes*, Dec. 18, 1897.

Dante's Influence on Shelley. *Ibid.*, June, 1898.

The Ancient and Modern Feeling for Nature. *Methodist Review*, November and December, 1897.

PROFESSOR ROSA.—An Electric Curve Tracer. Paper read at the meeting of the British Association for the Advancement of Science, Toronto, August, 1897. Published in *Electrical World*, New York, December, 1897.

The Law of the Conservation of Energy in the Human Body. Paper read at the British Association for the Advancement of Science, August, 1897 (in conjunction with W. O. Atwater).

Electric Resonance and Dielectric Hysteresis. Paper read at the American Association for the Advancement of Science, Detroit, August, 1897 (in conjunction with A. W. Smith).

Four lectures on Electricity. The University Extension Society, New Haven, Conn., November and December, 1897.

Publication.—An Electric Curve Tracer. *The Electrician*, London, November and December, 1897; *The Physical Review*, January, 1898.

DR. FARRAND.—*Publication.*—The Taxation of Tea, 1767-1773. *American Historical Review*, January, 1898.

DR. BENEDICT.—*Publication.*—The Determination of Small Quantities of Alcohol (with R. S. Norris). *Journal of the American Chemical Society*, April, 1898.

DR. JUDD.—*Lectures.*—The Modern Development of Psychology. Binghamton Academy of Science, Nov. 27, 1897.

The Visual Perception of Depth. American Psychological Association, Dec. 27, 1897. Reported in *Psychological Review*, March, 1898.

Some Factors of Perception. Yale Philosophical Club, March 15, 1898.

Publications.—Wundt's System of Philosophy. *Philosophical Review*, July, 1897.

Some Facts of Binocular Vision. *Psychological Review*, July, 1897.

Binocular Factors in Monocular Vision. *Science*, Feb. 25, 1898.

Retinal Images and Binocular Vision. *Science*, March 25, 1898.

An Optical Illusion. *Psychological Review*, May, 1898.

FACULTY LECTURE COURSE.

This year, as last, a course of public lectures has been given by members of the Faculty. The interest in these lectures has been attested by a large attendance not only from the College, but from the city. The list of speakers and subjects is as follows:

Tuesday, Nov. 30.—Modern Germany. President B. P. Raymond.

Thursday, Jan. 13.—Illusions, Normal and Abnormal. Dr. C. H. Judd.

Tuesday, Jan. 25.—The Story of the Troubadours. Professor L. O. Kuhns.

Tuesday, March 1.—The Criminal. Professor W. C. Fisher.

Tuesday, March 22.—Some Mistaken Theories in our Government. Dr. M. Farrand.

MIDDLETOWN SCIENTIFIC ASSOCIATION.

The following subjects have been discussed at the meetings of the Association since the last report in the BULLETIN:

May, 11, 1897.—"The Story of the Roman Forum," E. T. Merrill.

June 8.—"El Paso and the Flora of that Region," S. W. Loper. "The Theory of Volcanoes," W. N. Rice.

October 12.—"The Recent Meeting of the British Association in Toronto," E. B. Rosa.

November 16.—"The Yerkes Observatory," J. M. Van Vleck.

December 14.—"The Physical Geography of Connecticut," W. N. Rice.

January 18, 1898.—"Acetylene, its History and Uses," F. G. Benedict.

February 8.—"Arctic Exploration," Mr. Hugh J. Lee, of Meriden, Conn.

March 15.—"The Respiration Calorimeter," W. O. Atwater and E. B. Rosa.

April 19.—"The U. S. Life Saving Service," W. P. Bradley.

May 9.—"Notes on Recent X-Ray Work and on Wireless Telegraphy," M. B. Crawford.

THE APOSTLES' CLUB.

The following papers and discussions have been presented before the Club during the collegiate year 1897-98:

October.—Some Roman Remains in England. Professor Mead.

November.—The German Gymnasium. President Raymond.

December.—Perception of Space. Dr. Judd.

January.—History, Science, and Philosophy. Professor Armstrong.

February.—Recent Movements Tending Toward Socialism. Professor Fisher.

March.—Poetical Form. Professor Winchester.

April.—The Recent Classical Conference at Ann Arbor. Dr. Paton.

May.—Bacchylides. Dr. Hayley.

CHAPEL IMPROVEMENTS.

A new pipe organ has been placed in the Chapel; the old seats have been replaced by pews; the walls and ceiling have been redecorated, and new glass has been set in the windows to harmonize with the general tone of color in the

decorations. The work—with the exception of the replacing of the two Memorial windows—was done during the winter; and the Chapel, which had meanwhile been closed, was open for the daily morning service on the first day of the Spring Term.

The new organ was built by the well-known maker George S. Hutchings, of Boston. It is sufficiently powerful for the room, and is very satisfactory in tone. The rear partition wall which formerly separated the platform from the small room in the apse was taken down, and the organ placed in the recess thus formed. This gives room for choir seats in the rear of the platform. The organ case and the stall work are in quartered oak, and of pleasing design.

The specification of the organ is given below. The cost of the instrument was about \$3,500.

The pews are of quartered oak, and are cushioned throughout.

The ceiling and wall decorations are in shades of yellow and light brown, giving the room a light and at the same time a warmer color effect than it had before. All the work was under the direction of Mr. J. Cleveland Cady, of New York. The cost of the whole was about \$8,000.

The organ and the pews are the gift of Mr. Frank S. Jones, of Brooklyn. The new electrical and gas fixtures were given by Mr. Walter Hubbard, of Meriden.

The new Memorial Window, replacing that in memory of the Alumni and students who fell in the Civil War, is to be given by the Mansfield Post, of the Grand Army of the Republic. This window, and the one opposite containing the portraits of the first six presidents of the College, will be put in place during the coming summer vacation.

The large East window in the front of the Chapel is the gift of Mr. Charles Rockwell, of Meriden.

The following gentlemen have each given one of the side windows: Mr. Cephas Rogers, of Meriden; and Messrs. S. T. Camp and Lyman D. Mills, of this city.

The specification of the new organ is as follows:

Compass of Manuals from C to C, 61 notes.

Compass of Pedals from C to F, 30 notes.

GREAT ORGAN.

1.	8-ft. Open Diapason,	-	-	-	-	Metal, 61 Pipes.
2.	8-ft. Dolcissimo,	-	-	-	-	Metal, 61 Pipes.
3.	8-ft. Melodia, -	-	-	-	-	Wood, 61 Pipes.
4.	4-ft. Octave, -	-	-	-	-	Metal, 61 Pipes.
5.	4-ft. Flute d'Amour,	-	-	-	Wood and	Metal, 61 Pipes.
6.	2 $\frac{3}{4}$ -ft. Octave Quinte,	-	-	-	-	Metal, 61 Pipes.
7.	2-ft. Super Octave, -	-	-	-	-	Metal, 61 Pipes.
8.	8-ft. Trumpet, -	-	-	-	-	Metal, 61 Pipes.

SWELL ORGAN.

9.	16-ft. Bourdon Treble,	-	-	-	-	Wood, 61 Pipes.
10.	16-ft. Bourdon Base, -	-	-	-	-	Wood, 61 Pipes.
11.	8-ft. Violin Diapason,	-	-	-	Wood and	Metal, 61 Pipes.

12.	8-ft. Salicional (Æoline),	-	-	-	-	Metal, 61 Pipes.
13.	8-ft. Vox Celestis,	-	-	-	-	Metal, 49 Pipes.
14.	8-ft. Stopped Diapason,	-	-	-	-	Wood, 61 Pipes.
15.	4-ft. Flute Harmonique,	-	-	-	-	Metal, 61 Pipes.
16.	4-ft. Violina,	-	-	-	-	Metal, 61 Pipes.
17.	8-ft. Oboe,	-	-	-	-	Metal, 61 Pipes.
18.	8-ft. Bassoon,	-	-	-	-	Metal, 61 Pipes.

PEDAL ORGAN.

19.	16-ft. Bourdon,	-	-	-	-	Wood, 30 Pipes.
20.	8-ft. Flute,	-	-	-	-	Wood, 30 Pipes.

MECHANICAL REGISTERS.

21. Swell to Great, Coupler.
22. Great to Pedal, Coupler.
23. Swell to Pedal, Coupler.
24. Blower's Signal.
25. Wind Indicator.

PEDAL MOVEMENTS.

1. Forte, Great Organ.
2. Piano, Great Organ.
3. Forte, Swell Organ.
4. Piano, Swell Organ.
5. Reversible Great to Pedal Coupler.
6. Tremolo.
7. Balanced Swell Pedal.

RECENT GIFTS.

Since the last issue of the BULLETIN, \$15,000 more has been received from the residual estate of Daniel B. Fayerweather.

About \$500 has also been paid in on the Library Fund.

A number of valuable donations have been received by the Museum and by the Chemical Department, which are noticed elsewhere under appropriate headings. Special attention should also be called to several gifts toward the re-decoration and refurnishing of the College Chapel.

JUNIOR EXHIBITION.

The Annual Junior Exhibition was held in Memorial Chapel on the evening of Thursday, April 28. The judges were Superintendent Walter Bixby Ferguson, B. A., of Middletown; Mr. Albert Marshall Hitchcock, M. A., of Hartford; and Superintendent Giles Alfred Stuart, M. A., of New Britain. These gentlemen awarded the first prize to Joseph Beech, who spoke on "The Student Missionary Movement," and the second prize to Wilbur Reed Mattoon, whose subject was "Tendencies Towards Positive Belief."

JUNIOR EXHIBITION AND COMMENCEMENT APPOINTMENTS.

After the present year the number of speakers at Junior Exhibition and at Commencement will be limited to eight; and if any members of the class receiving appointments shall decline them, others will immediately be appointed in their places to make the whole number of speakers eight.

Previous announcement of the time when appointments are to be given out will be made; and it is expected that those who receive them will be ready to signify at once whether they accept or decline them.

THE YOUNG MEN'S CHRISTIAN ASSOCIATION.

The work of the Young Men's Christian Association has been prosecuted with success during the past year. Approximately sixty per cent. of the male students are active, and ten per cent. associate, members. The regular meetings have been quite well attended, and, in addition, there have been three series of special meetings, the first series consisting of five meetings in November, in observance of the Week of Prayer for Young Men; the second held in connection with the Day of Prayer for Colleges in January, and including the public service at which the Rev. Wallace MacMullen, D. D., preached the sermon; the third series displacing the class prayer meetings during February, and being addressed by President Raymond on the general topic "Fundamentals of the Faith."

Interest in missions has increased, the class for missionary study having been larger and more successful than ever before. A delegation of four men represented the association at the great Student Volunteer Convention at Cleveland, in February, and steps have been taken to inaugurate a plan of systematic giving to the cause of missions by students.

For voluntary Bible study there have been three classes in operation during the year, with an initial enrollment of fifty-five and an average attendance of twenty-five. The Life of Christ, the Parables of Christ, and the Life of Paul formed the subjects of study.

Neighborhood work has been engaged in regularly by about fifteen students and there have been a much larger number of occasional participants. The A. M. E. Zion Sunday School, the Almshouse, and a Mission Sunday School in Portland continue to be the principal points supplied. The services held during the year aggregate one hundred and thirty, and the Sunday School classes taught, two hundred and ten.

The usual reception in honor of the freshman class was given October 13th, and the Annual Meeting and Reception occurred May 5th. At this gathering the Rev. Levi Gilbert, D. D., delivered the address, and Mr. John S. Camp gave a short recital upon the new organ.

THE LIBRARY.

There have been presented to the Library from May 1st, 1897, to April 30th, 1898, 787 bound volumes and 4,883 pamphlets. The principal donors were the United States Government, the Connecticut State Library, the New York State Library, the Museum of Comparative Zoölogy, Cambridge, Mass., W. P. Bradley, H. E. Burton, '64, A. B. Calef, '51, Mrs. D. J. Dean, R. S. Douglass, '61, M. Farrand, W. C. Fisher, L. R. Hazen, C. D. Hine, A. H. Meritt, '89, Hon. O. H. Platt, B. A. Rich, '78, J. M. Van Vleck, '50, Joseph Van Vleck, Mrs. G. N. Ward, John Williams White, C. T. Winchester, '69.

An inquiry concerning the participation of graduates and students of Wesleyan University in the Civil War has called attention to the "Army and Navy

Union of Wesleyan University," formed at the close of that war. The Librarian wishes to obtain the records of the Union, if they are still in existence, copies of the rosters issued, and other information concerning the organization.

During the past year the sum of \$18 has been received from the treasurer of the class of '94 as a payment upon the '94 subscription for the purchase of books on political economy.

Since the publication of the last BULLETIN the sum of \$500 has been paid on account of subscriptions to the Library Endowment Fund.

THE MUSEUM.

A number of noteworthy accessions have been received since the publication of the last BULLETIN.

The most important is the gift of a collection of the Butterflies and Moths of New England, from Mrs. E. K. Hubbard. The collection includes about ninety species. The specimens are mounted on the elegant tablets invented and manufactured by Denton Brothers, of Wellesley, Mass., from whom the collection was purchased. Specimens mounted in this way are not liable to the rapid deterioration from which it is difficult to preserve ordinary pinned specimens of Lepidoptera. A collection representing so fully that group of insects for this region is of great value for popular education, as well as for use in the class-room. The collection is accompanied by a copy of S. F. Denton's "Moths and Butterflies of the United States," illustrated by plates in which the scales of the wings have been transferred to the paper, thus showing the color and luster as would be impossible with pigments.

A collection of about twenty species of fossils from the Cambrian and Waterlime formations has been received as a gift from the U. S. National Museum. Important desiderata are supplied by this collection.

A collection of over seventy species of European fossils, chiefly Jurassic and Tertiary, purchased from Mr. Alphonse Bel, has been presented to the Museum by Mr. A. R. Crittenden. A small collection of Liassic fossils has been more recently purchased from Mr. Bel by the Museum.

From Mr. Hugh J. Lee, of Meriden, who was with Lieutenant Peary in three of his expeditions to Greenland, the Museum has purchased a large mass of the basalt containing native iron, from Disco Island. The iron in this remarkable rock was supposed, when first discovered by Nordenskiöld, to be meteoric, but is now regarded as truly terrestrial.

A large block of gneiss, showing unusually fine glacial markings, from Norfolk, Conn., has been presented to the Museum by Mr. Edmund Brown, of Norfolk.

Mrs. George N. Ward has presented an interesting collection of weapons, musical instruments, and other articles from the west coast of Africa, collected by her brother, the late Rev. C. L. Loomis, M. D., formerly a missionary in

that locality. Besides the implements, there is an interesting series of drawings by Dr. Loomis, illustrating native customs as they fell under his own observation.

Mrs. W. W. Wilcox has given to the Museum a choice collection of images and other objects from China and Japan.

An Australian skull, obtained by the late Hon. T. R. Pickering, during his visit to Australia as U. S. Commissioner to the Melbourne Exposition, has been presented to the Museum by Mrs. Pickering.

During the past winter, Mr. Loper has spent much time in preparing the collection of Crinoids from Crawfordsville, Ind., the gift of Mr. Henry I. Nettleton, of Durham, mentioned in a former BULLETIN. Under Mr. Loper's skillful and patient treatment, the exquisite preservation of these beautiful fossils is revealed. A part of the collection has been placed on exhibition, and forms one of the most attractive exhibits in the Museum.

The educational series of American Rocks, presented by the U. S. Geological Survey, has been placed on exhibition in a special case opposite to the case containing the general Lithological collection. The two collections are classified on somewhat different principles, and each of the series serves to illustrate important relations.

The wall space in the vestibule of the Museum has been utilized by putting up shelves for the display of tracks of reptiles and other fossils from the Triassic of the Connecticut Valley. The new arrangement permits a satisfactory display of a large part of the collection of tracks from the Connecticut sandstones, much of which had not been exhibited before.

ENTRANCE REQUIREMENTS IN ENGLISH.

A conference of teachers of English was held in New York, May 31, 1897. There were present at the Conference delegates representing the following bodies. The Commission of New England Colleges on Entrance Examinations, the New England Association of Colleges and Preparatory Schools, the Association of Colleges and Preparatory Schools of the Middle States and Maryland, the North Central Association of Teachers of English, and the Association of Colleges and Preparatory Schools of the Southern States.

This Conference recommended lists of books to be read and studied for the Admission Examinations of 1901 and 1902; and after extended discussion of the whole matter of English admission requirements, adjourned to meet in Philadelphia, Dec. 29.

At this adjourned meeting, after further protracted discussion, the Conference voted a series of recommendations as to the teaching of English in the preparatory schools. These recommendations—especially the seventh—were drawn up largely to meet the demand from many schools for some fuller explanation of the formal statement of requirements printed in the College Catalogues. They

are printed here, by direction of the Faculty, as likely to be welcome, not only to teachers in the schools who are preparing students for college, but to all those interested in the study of English.

The Conference recommended:

1. That English be studied throughout the primary and secondary school courses, and, when possible, for at least three periods a week during the four years of the High School course.

2. That the prescribed books be regarded as a basis for such wider course of English study as the schools may arrange for themselves.

3. That, where careful instruction in idiomatic English translation is not given, supplementary work to secure an equivalent training in diction and in sentence-structure be offered throughout the High School course.

4. That a certain amount of outside reading, chiefly of poetry, fiction, biography, and history be encouraged throughout the entire school course.

5. That definite instruction be given in the choice of words, in the structure of sentences and of paragraphs, and in the simple forms of narration, description, exposition, and argument. Such instruction should begin early in the High School course.

6. That systematic training in speaking and writing English be given throughout the entire school course. That, in the High School, subjects for compositions be taken, partly from the prescribed books, and partly from the student's own thought and experience.

7. That each of the books prescribed for study be taught with reference to
- a.* The language, including the meaning of the words and sentences, the important qualities of style, and the important allusions;
 - b.* The plan of the work, *i. e.*, its structure and method;
 - c.* The place of the work in literary history, the circumstances of its production, and the life of the author.

That all details be studied, not as ends in themselves, but as means to a comprehension of the whole.

RECENT COLLEGE APPOINTMENTS.

CLASS.

1865. William North Rice, Brooks Lecturer on the Relations of Religion and Science, Hamilton Theological Seminary, Colgate University.
1868. Ensign McChesney, Dean of the College of Fine Arts, Syracuse University.
1869. Henry Alanson Starks, Lecturer in Ethics and Evidences of Christianity, Wesleyan University.
1875. Millard Mayhew Parker, President of the University of Arizona.
1884. Albert Raddin Sweetser, Professor of Biology and Chemistry, Pacific University, Forest Grove, Oregon.
1885. Irving Samuel Haynes, Professor of Practical Anatomy, Cornell University Medical College, New York, N. Y.

CLASS.

1891. Isabel Evangeline Graves, Fellow in English, University of Pennsylvania.
 1891. Albert Elmer Hancock, Instructor in English and Romance Languages, Williams College.
 1893. Franklin Barber, University Scholar, Harvard University.
 1893. Daniel Acker Lehman, Professor of Mathematics, Baldwin University, Berea, Ohio.
 1893. Vida Frank Moore, Graduate Scholar in Philosophy, Cornell University.
 1893. Ashley Horace Thorndike, Shattuck Scholar, Harvard University.
 1895. Edward Lee Thorndike, University Fellow, Columbia University.
 1897. Charles Harvey Brown, Assistant Librarian, Wesleyan University.
 1897. Francis Reid North, University Scholar, Columbia University.
 1897. Alvenza Ingham Smith, Assistant to the Secretary of the Faculty, Wesleyan University.

OBITUARY RECORD.

The following deaths among the Alumni have been reported since the publication of the last Obituary Record:

CLASS.

1839. Sidera Chase, b. 31 October, 1818, in Hoosick, Rensselaer Co., N. Y.; d. 21 September, 1897, in Nordhoff, N. J.
 1839. Dennis Sage, b. 21 August, 1817, in Middletown, Conn.; d. 26 July, 1897, in Boston, Mass.
 1846. Seth Loring Sprague, b. 25 August, 1825, in Duxbury, Mass.; d. 25 March, 1897, in Weston, Mass.
 1847. Charles Augustus Goodrich Brigham, b. 3 December, 1823, in Worcester, Mass.; d. 12 October, 1897, in Hartford, Conn.
 1849. Daniel Ames, b. 2 February, 1822, in Springfield, Mass.; d. 23 January, 1898, in Harpers Ferry, W. Va.
 1849. John Wesley Jones, b. 31 August, 1821, in Lincolnville, Waldo Co., Me.; d. 14 November, 1897, in Benicia, Cal.
 1852. George Washington Streeter, b. 8 July, 1825, in Lisbon, Grafton Co., N. H.; d. 18 March, 1897, in New York, N. Y.
 1853. Hiram Augustus Jones, b. 3 December, 1831, in Grafton, Mass.; d. 11 April, 1898, in Appleton, Wis.
 1853. Julius Augustus Skilton, b. 29 June, 1833, in Troy, N. Y.; d. 20 November, 1897, in Brooklyn, N. Y.
 1854. Joseph Hughes Knowles, b. 19 April, 1831, in Yardville, Mercer Co., N. J.; d. 19 February, 1898, in New York, N. Y.
 1856. Daniel Pomeroy, b. 2 September, 1834, in Galway, N. Y.; d. 4 February, 1898, in New York, N. Y.
 1857. William Newton Reno, b. 26 July, 1819, in Sharon, Penn.; d. September, 1896, in Spartansburg, Penn.

CLASS.

1858. Solomon Parsons, b. 10 August, 1832, in Dover, N. J.; d. 21 November, 1897, in Paterson, N. J.
1859. Stephen James King, b. 16 January, 1838, in St. John, N. B.; d. July, 1896, in St. John, N. B.
1860. Andrew Kerr Crawford, b. 22 April, 1830, in Economy, N. S.; d. 11 October, 1897, in Oakland, Cal.
1860. Ichabod Simmons, b. 24 December, 1831, in Duxbury, Mass.; d. 14 April, 1898, in Hartford, Conn.
1861. Richard Seaman Williams, b. 4 April, 1841, in Searingtown, Queens Co., N. Y.; d. 15 April, 1896, in New York, N. Y.
1879. Edward Prescott Coffin, b. 22 June, 1854, in Fairfield, Me.; d. 16 November, 1897, in Boston, Mass.
1885. Edward Augustus Welch, b. 10 May, 1862, in Northfield, Mass.; d. 29 November, 1897, in Sutton, Mass.
1892. Thomas Hanlon Atkinson, b. 17 July, 1872, in Jersey City, N. J.; d. 14 February, 1898, in Jersey City, N. J.

CALENDAR.

1898.

- June 2, Thursday, 7:30 P. M.,—Junior Prize Debate.
- June 24, Friday, 7:30 P. M.,—Freshman, Sophomore, and Junior Prize Declamation.
- June 26, Sunday, 10:30 A. M.,—Baccalaureate Sermon, Rev. Bradford Paul Raymond, D. D., LL. D.
- June 26, Sunday, 7:30 P. M.,—University Sermon, Rev. S. P. Cadman.
- June 27, Monday, 11:00 A. M.,—Public Awarding of Prizes.
- June 27, Monday, 2:00 P. M.,—Class Day Exercises.
- June 27, Monday, 8:00 P. M.,—Annual Meeting of Board of Trustees.
- June 27, Monday, 8:00 P. M.,—Glee Club Concert.
- June 28, Tuesday, 9:00 A. M.,—Meeting of the Φ. B. K. Fraternity.
- June 28, Tuesday, 10:00 A. M.,—Business Meeting of the Alumni Association.
- June 28, Tuesday,—Reunions of Classes of 1848, '58, '73, '78, '83, '88, '91, '93, '95.
- June 28, Tuesday, afternoon,—Receptions by the College Fraternities.
- June 29, Wednesday, 10:00 A. M.,—COMMENCEMENT.
- June 29, Wednesday, afternoon,—Commencement Dinner.
- June 29, Wednesday, evening,—President's Reception.
- June 30, Thursday, 9:00 A. M.,—Examination of candidates for admission begins.
- Sept. 28, Wednesday, 9:00 A. M.,—Examination of candidates for admission begins.
- Sept. 29, Thursday, 9:00 A. M.,—First Term begins.

—THE—
Wesleyan University Bulletin.

MIDDLETOWN, CONN.

NOVEMBER, 1898.—No. 23.

IT is a satisfaction to be able this year to announce that the number of students is greater than ever before. In 1888 the entire number of students was 190; this year there are 331.

Of the twelve students who enlisted in the recent war against Spain, nine have been mustered out in good health. One has died, Norris, '96 (who was still a graduate student at the time of his enlistment), and two are sick in the hospital. None of the men were sent to the front, but were stationed at various points on American soil.

For several years the inadequacy of several of our college buildings has been painfully evident. Judd Hall can hardly be expected much longer to afford sufficient accommodation for the Museum and for the growing scientific departments. The Library building should be entirely reconstructed in its internal arrangements, with fireproof stacks for books, and seminary rooms adjacent to the sources of information. A new dormitory of the modern type is desirable. But by far the most pressing need is a suitable administrative building, with lecture rooms of sufficient size to accommodate large classes. In a little more than fifteen years the number of students has doubled, and the faculty has increased in about the same proportion. But the number of recitation rooms is only two or three larger than it was when our entire number of students was about half as great as at present. The evil results of overcrowding are too evident to require enumeration, but it is equally evident that they cannot be allowed to progress beyond a certain point. From one point of view the

overcrowding is gratifying, for it is an evidence of steady growth, but if our numbers are to increase far beyond what they now are, we shall be unable to conduct our classes in the present buildings.

By the bequest of the late Albert S. Hunt, D. D., of New York, the Library receives \$30,000 in money and about 6,000 choice books. This is by far the largest single gift that the Library has ever received, and it will incalculably increase the efficiency of work in every department of the University.

The fact must not be overlooked, however, that the \$50,000 Alumni Library Fund is by no means completed, and that several thousand dollars are still needed. Some of the subscriptions already made are unconditional, but others cannot be realized unless the entire amount is subscribed.

No recent change in the college buildings has met with more general approval than the introduction of electric lighting into the Library, thus making possible the opening of the Library in the evening. The advantage to all students is great, but especially to those doing advanced work on reserved books.

NOTES OF THE LAST COMMENCEMENT.

TRUSTEE MEETING.—The Annual Meeting of the Board of Trustees was opened on the evening of Monday, June 27, 1898, and was concluded on the following day. Hon. George G. Reynolds, LL. D., was reëlected President of the Board; John E. Andrus, Treasurer; and Rev. Edmund M. Mills, Ph. D., D. D., Secretary.

The President of the University presented his annual report, and George S. Coleman the report of the Visiting Committee. An appropriate minute in regard to the decease of Rev. William Rice, D. D., was adopted and entered upon the records of the Board. A similar minute concerning the decease of Rev. William Griffin, D. D., has been prepared by a committee consisting of J. E. King and J. H. Coleman, and will also be added to the records.

The Library Committee consisting of President B. P. Raymond, C. T. Winchester, O. Kuhns, and W. J. James was reappointed.

The President of the University was authorized to confer the following honorary degrees: The degree of Doctor of Divinity upon Rev. Wilbert P. Ferguson, of Hackettstown, N. J.; Rev. Samuel Parks Cadman, of New York, and Rev. Joseph Pullman, of Patchogue, N. Y.; the degree of Doctor of Laws upon

Henry T. Burgess, of Australia, and Rev. Samuel Foster Upham, D. D., of Madison, N. J.; the degree of Master of Arts upon Middlesex Alfred Bailey and George Lincoln Plimpton.

The following trustees were reëlected: William Hoyt, Bowles Colgate, Samuel T. Camp, Hon. Phineas C. Lounsbury, and George Silas Coleman. The vacancy caused by the death of Rev. William Rice was filled by the selection of Andrew Craig Fields.

The following appointments were made to the Board of Instruction:

Francis G. Benedict, Ph. D., Instructor in Chemistry.

George H. Ling, Ph. D., Instructor in Mathematics.

Herman W. Hayley, Ph. D., Instructor in Latin.

Raymond Dodge, Ph. D., Instructor in Psychology.

A. W. Smith, M. S., Assistant in Physics.

W. M. Esten, M. S., Assistant in Biology.

Charles H. Brown, B. A., Assistant Librarian.

Samuel W. Loper, M. A., Curator of the Museum.

The appointment of an Assistant in the department of Romance Languages was also authorized.

The question of establishing a system of fellowships was referred to a special committee consisting of President B. P. Raymond, J. M. Van Vleck, and G. G. Reynolds.

The Visiting Committee appointed for the year 1898-99 consists of Rev. William V. Kelley, D. D.; Rev. Olin B. Coit, D. D.; and Rev. Edmund M. Mills, Ph. D., D. D.

ALUMNI ASSOCIATION.—The Annual Meeting of the Association was held on Tuesday of Commencement Week.

The following officers for the ensuing year were chosen: President, F. Mason North; Vice-Presidents, Charles F. Rice, F. D. Beattys, Marcus White; Recording Secretary, O. Kuhns; Secretary, W. J. James; Treasurer, S. V. Coffin.

Judge A. B. Calef was elected a member of the Alumni Library Committee.

The Executive Committee was instructed to consider methods of making the meetings of the Association more interesting, and, in particular, the advisability of presenting topics for discussion.

Announcement was made of the reëlection of Hon. William C. Wallace, LL. B., and Webster R. Walkley, M. A., as Alumni Trustees.

At 11:45 A. M. the Association met in joint session with the Board of Trustees in the Upper Chapel. The portrait of Bishop Cyrus D. Foss, D. D., LL. D., the gift to the College of a number of his friends and former students, was then presented to the Trustees by Rev. F. B. Lynch, D. D., and was received on their behalf by Rev. Albert S. Hunt, D. D., in a speech of fitting and tender recollection. This portrait completes the series of portraits of former presidents of the University, which adorns the Library.

THE FINANCES.—The following is a brief statement of the property of the College, according to the most recent appraisal, and of the income and expenditures for the financial year 1897-98:

Property of the University.

Invested funds and productive real estate, - - -	\$1,232,100 00
College buildings and campus, - - - - -	531,300 00
Scientific collections and apparatus, - - - - -	85,255 00
Library, - - - - -	45,000 00
Unproductive real estate, - - - - -	13,304 31
Furniture in various College buildings, - - -	12,230 00
Cash, - - - - -	7,909 17
Total, - - - - -	\$1,927,098 48

Receipts from May 31, 1897, to May 31, 1898.

Students' bills,* - - - - -	\$36,019 05
Interest on investments and rents, - - - - -	59,606 73
Fayerweather estate, accrued interest on legacy, -	4,481 40
Women's Dormitory, - - - - -	6,684 60
Alumni Library income, - - - - -	1,115 94
Special subscriptions for Chapel renovation, - -	4,585 00
Special subscriptions for other purposes, - - -	275 48
Miscellaneous, - - - - -	2,261 41
Balance advanced by Treasurer, May 31, 1898, -	1,650 70
Total, - - - - -	\$116,680 31

Expenditures from May 31, 1897, to May 31, 1898.

Salaries, - - - - -	\$59,650 00
Fuel, light, water, insurance, - - - - -	5,412 81
Janitorial service, - - - - -	4,131 11
Repairs and improvements, - - - - -	4,492 38
Women's Dormitory, - - - - -	5,176 05
Department appropriations, - - - - -	3,234 93
Library, - - - - -	1,871 61
Aid to students—tuition, - - - - -	14,427 50
Interest, annuities, and scholarships, - - -	1,837 37
Chapel renovation, - - - - -	4,570 89
Printing, postage, catalogues, bulletins, etc., -	2,865 03
Miscellaneous, secretarial assistance, Commencement	
expenses, prizes, etc., - - - - -	6,151 86
Balance due Treasurer, May 31, 1897, - - -	2,858 77
Total, - - - - -	\$116,680 31

* Inclusive of \$14,427.50 tuition remitted.

In addition to the above expenditures \$5,679.56 has been spent during the financial year in laying out the Athletic Field, the cost of which is borne by John E. Andrus.

APPOINTMENTS TO THE FACULTY.

RAYMOND DODGE, elected Instructor in Philosophy last June, received the degree of B. A. from Williams College in 1893. The next year after graduation he remained at Williams as Assistant Librarian, at the same time taking graduate work in Philosophy. The academic years 1894-96 he spent at the University of Halle, working chiefly under Prof. Dr. Benno Erdmann, and receiving the degree of Ph. D., *magna cum laude*, in the summer of '96. The following year he remained in Halle as Prof. Erdmann's assistant in the Psychological Institute. In the spring of 1897 he was appointed Professor of Philosophy and Psychology at Ursinus College, Collegeville, Pa., which position he resigned to accept his appointment at Wesleyan.

Dr. Dodge has published the following: Beschreibung eines neuen Chronographen (Zeitschrift für Psychologie und Physiologie der Sinnesorgane, Bd. X.). Die Motorischen Wortvorstellungen (Abhandlungen zur Philosophie und ihrer Geschichte).

Besides these Dr. Dodge collaborated with Prof. Dr. Erdmann in the publication of Psychologische Untersuchungen über das Lesen auf experimenteller Grundlage, which has just appeared, embracing the most important results of the investigations in the Psychology of language, carried on while Dr. Dodge was in Halle.

HENRY E. FORD, elected Instructor in Modern Languages, was graduated from the University of Toronto in 1895, with Honors in Modern Languages. The following year he was a student in the Ontario Normal College, receiving a specialist's certificate in Modern Languages. During 1896-97 Mr. Ford was a graduate student at the Johns Hopkins University, Baltimore. In 1897 he became teacher of English, French, and German in the High School at Norwood, Ontario, which position he left to accept the appointment at Wesleyan.

DEPARTMENT NOTES.

LATIN.—In the absence of Professor Merrill, who is serving this year as Professor of the Latin Language and Literature in the American School of Classical Studies in Rome, the classes in Latin are conducted by Associate Professor Nicolson and Dr. Hayley. The courses given comprise the usual Freshman and Sophomore reading courses, the course in Latin composition, and two courses open to Juniors and Seniors, one in the Fasti of Ovid, now being given for the first time, by Professor Nicolson, the second in the Annals of Tacitus, by Dr. Hayley.

The examination for the Phi Beta Kappa Prize for 1898-99 will be held in June, 1899, the day to be announced later. It will consist of the following parts:

- 1st. Translation at sight of Latin prose and poetry into English.
- 2d. Translation at sight of English narrative prose into Latin prose.
- 3d. The submission of a previously prepared translation into Latin prose of the sentences in Macaulay's History of England, chapter I., beginning, "James was always boasting," and ending with "greatly losing their strength." The passage will be found in the description of the character of James I., on page 68 of Harper's edition, 1849.

4th. A general paper of questions designed to test the candidates' knowledge of Latin Grammar and of Roman Antiquities, Mythology, and Political and Literary History.

The examination in parts 1 and 4 for this prize will be identical with the examination in Latin for preliminary honors in classics for 1898-99, and need not be repeated by candidates for such honors.

GREEK.—The Sherman Prize is awarded the present year to that member of the Freshman class who shall excel in Greek. The examination will be held toward the end of the College year, and will cover the following subjects:

1. Translation at sight of Greek prose and verse, selected from the authors read in the preparatory course and in I. Greek.
2. An examination, based upon the passages set for sight translation, and including questions upon Grammar, History, and Antiquities.
3. The oration of Lysias against Eratosthenes.

The examination for the Spinney Prize will be open to those who are taking II. Greek, and will cover the following subjects:

1. Translation at sight of Greek prose and verse.
2. A general paper, including questions on Greek Grammar, Antiquities, Mythology, and Political and Literary History.
3. The Third Philippic of Demosthenes.

The examination in subjects 1 and 2 will be identical with the examination in Greek required for preliminary honors in classics, and need not be repeated by candidates for such honors.

GERMAN.—The transfer of one of the sections in I. German to Mr. H. E. Ford has made possible the addition of a one-hour course (IV.) in Prose Composition and Advanced Grammar. This course is intended primarily for those who expect to teach German, and during the second half-year a portion of the time will be given to a consideration of methods. This course takes the place of the course in Lyrical Poetry, which has been temporarily discontinued.

ROMANCE LANGUAGES.—The addition of a new instructor in the department of Modern Languages has rendered it possible to divide the class in I. French, and thus to pay more attention to the individual needs of the students.

A new course, of one hour a week, is given this year, in the theory of French Pronunciation, and Advanced Grammar and Composition.

ETHICS.—In response to repeated requests of students a course of instruction has been opened in the English Bible. The work is in charge of Dr. Starks, and for the present year is entirely in the New Testament.

The subjects are the Gospels and the chief products of the Apostolic Age; the methods, historic and literary, involving the leading features of what are known to Biblical scholars as Introduction, Exposition, and Biblical Theology.

The class meets two hours a week, is elective for Seniors and Juniors, and numbers thirty-six students.

CHEMISTRY.—Several changes have been made lately in the chemical laboratories. The large room in the rear of the basement, which has been used for a number of years past as a laboratory for the classes in elementary Chemistry, has been fitted up and furnished so as to make this "Basement Laboratory" a much more inviting place than formerly. The "Calorimeter Room" has been somewhat enlarged, and arrangements have been made for transferring to this room and the basement laboratory all the chemical work which has been done heretofore in Professor Atwater's private laboratory on the first floor. This room and the adjoining study of Professor Atwater now form the "Chemical Library" rooms, but, in addition to its fittings as a library, the former laboratory has been provided with tables and desks for assistants and advanced students, so that it may also serve as office and seminary room. Less important changes have been made in the "Analytical Laboratory" and the Chemical Lecture Room.

These changes have all been made with special reference to the needs of some of the small elective classes, and particularly the Chemical Seminary, which this year is larger, and promises to be more interesting than ever.

Dr. O. F. Tower, for several years Assistant in Chemistry, has been called to Western Reserve University, and his place is now filled by Dr. J. F. Snell, for three years Assistant in Chemistry at Cornell University.

[The above notes are condensed from an article furnished the *Wesleyan Argus* by Professor Atwater.]

GEOLOGY.—In courses II. and III. Geology this year two text-books are used, viz., Le Conte's Elements of Geology, and Dana's Revised Text-Book of Geology, in the belief that a comparison of these two books will afford the student a sounder general knowledge of the subject than would be obtained from any one text-book.

In the course in Crystallography the subject is treated on the basis of the symmetry of molecular arrangement, and crystals are classified not only in the six systems, but in the thirty-two classes determined by the degree of symmetry. Until the present year it has not been deemed advisable to present the subject in that manner, from the lack of any text-book in the English language to which the students could refer in connection with the lectures. That desideratum has now been supplied by the publication of the latest edition of Dana's Text-Book.

BIOLOGY.—There are several changes of importance in the plan of work in the various courses, the most important being as follows:

General Biology and Botany (II. and III.)—These two courses are to be combined more closely than heretofore, so as to form practically a single course. The first half of the work will remain unchanged, but the last half will comprise a larger amount of practical work with the microscope. The study of the cellular structure of animals and plants and the study of Cryptogams will occupy the class for the last half-year, with the exception of about three weeks to be devoted to the study of flowers.

Zoölogy.—This course is so changed that the systematic study of Zoölogy will end with the Winter Term. The Spring Term will be entirely devoted to the study of Comparative Anatomy and problems in theoretical Zoölogy.

The efficiency of this course has been much increased this year by the addition of a large amount of illustrative material for class purposes. Part of this was procured and prepared by Professor Conn at the Zoölogical Station at Naples, and part has been purchased by a special appropriation from the College. This material makes it possible to show to the class representatives of nearly all types of animals studied.

Biological Laboratory.—The work in the laboratory is supplemented this year by a course of lectures upon Cytology. The lectures are given once a week, and all students in the Biological Laboratory are expected to attend them. The course will include the study of cells and of heredity in accordance with the discoveries of modern microscopy.

ENGLISH LANGUAGE.—A course of rapid reading in early English authors, including selections from Chaucer's *Canterbury Tales*, early English ballads, specimens of the *Mystery and Miracle Plays*, and of Malory's *Morte Darthur*, will be given in the second half-year. This course is open to Juniors without reference to previous courses in the department. One hour (counting as two hours) a week.

THE LIBRARY.

The largest single gift ever received by the Library has come from the late Rev. Albert Sanford Hunt, D. D., of the class of 1850, who has willed to the University his entire private library and the sum of \$30,000, providing that the income of this fund shall be used in the purchase of books. This library contains over 6,000 volumes. It is especially rich in theology, containing full sets of the works of the great English divines, complete series of the Bampton, Hulsean, Hibbert, and other lectures, translations of the works of the German theologians, and all the important writings of modern American and English theologians. The library is also strong in Church history, in the writings of the early American statesmen, in American and English literature, and in books

of reference. The books are handsomely bound, mostly in leather, and will furnish an adornment as well as a very useful and valuable addition to our Library. Nearly half of the library has already been received.

The introduction of electric lights into the Library building greatly increases the usefulness of the Library. The entire direction of this well planned and well-executed improvement was in the hands of the College mechanic, Mr. Blakeslee. The main hall of the building has been turned into a reading room by placing in it new chairs and tables. The Library is now open 11 $\frac{1}{4}$ hours every week day, thus satisfying the growing demand for longer hours. There is already a gratifying use of the Library during the late afternoon and evening.

The opening of the Library for a greater number of hours each day has necessitated some changes in the regulations. Reserved books and reference books cannot be taken out at all, and current periodicals can be taken out only from Saturday night till Monday morning.

THE MUSEUM.

In the early part of the summer vacation, Mr. Loper, the Curator of the Museum, did considerable work at the locality in Durham, Conn., which had already yielded a great number of fine specimens of Triassic fishes. His work last summer was exceedingly successful, a large number of remarkably beautiful specimens being obtained, including several specimens of rare species.

In the late summer and early fall, Mr. Loper made an expedition to Fossil, Wyo., and Florissant, Colo. At the former locality he obtained from the Eocene lacustrine beds a great number of exquisitely preserved fossil fishes, many insects, and many vegetable remains, including a magnificent frond of a fan palm four feet in width. From the Oligocene lacustrine beds at Florissant he obtained a very large collection of plants and insects, together with some fishes. In the course of the journey many minerals and other valuable specimens were obtained. The collections are at present displayed on temporary tables in the lower hall of the Museum. The whole number of specimens collected in the expedition is estimated to be about thirteen hundred. Many of them are of great value and extraordinary beauty.

Since the publication of the last BULLETIN gifts of money have been received by the Museum amounting to \$390. The two principal donors are Miss E. J. Mead, of Stamford who has given \$200, and Rev. C. H. Huck, D. D., of Bristol, who has given \$100. Other contributors are Hon. C. C. Corbin, of Webster, Mass.; Hon. M. A. Knapp, of Washington, D. C.; D. L. Robertson, Esq., of Glens Falls, N. Y.; and Prof. W. N. Rice. Of the amount thus contributed, \$130 has been applied to the purchase of miscellaneous specimens for the Museum, and \$260 has been expended in part payment for the Crittenden collection of Indian relics, which has been referred to in former BULLETINS, and which by the public spirit of Mr. Crittenden has been deposited in the

Museum It is earnestly hoped that at no distant day a sufficient amount may be raised for the purchase of the entire collection. It certainly ought not to be allowed to pass out of the possession of the University.

ALBERT SANFORD HUNT.

In the death of Rev. Albert Sanford Hunt, D. D., Wesleyan University has lost one of its most honored alumni and most loyal friends. Dr. Hunt was graduated in the class of 1851, standing at the head of his class. After his graduation he served for two years as Tutor, and then for two years as Adjunct Professor of Moral Science in Wesleyan University. The years from 1855 to 1859 were devoted to rest and travel, whereby his health, which had been impaired, was restored. In 1859 he joined the New York East Conference of the Methodist Episcopal Church, and served in the pastorate until 1878. It is a noteworthy fact that all the churches to which he ministered were in the city of Brooklyn. In 1878 he was elected one of the Secretaries of the American Bible Society, and he held that position until his death. In 1873 he received from his Alma Mater the degree of Doctor of Divinity. He was a member of the Board of Trustees from 1888 until his death.

Dr. Hunt was a rare example of those graces of character which mark the scholar, the gentleman, and the Christian. It would be scarcely possible for any one who knew him to conceive of his doing any act, or speaking any word, which would violate morality, or propriety, or good taste. His whole life was a comment on the words of St. Paul, "Whatsoever things are true, whatsoever things are honest, whatsoever things are just, whatsoever things are pure, whatsoever things are lovely, whatsoever things are of good report, if there be any virtue, and if there be any praise, think on these things." In his short term of service in the college faculty, the influence of his pure and noble character was a benediction to many a student. His preaching revealed earnest study of the Bible, exquisite literary taste, and profound spirituality. In his pastoral work, he was remarkable for his power of attracting and influencing young men. In the service of the great charitable organization to which the last twenty years of his life were devoted, he was a most efficient officer. His addresses before various ecclesiastical bodies, in behalf of the society which he represented, were always appropriate, dignified, and impressive, and were often surpassingly eloquent.

His profound love for Alma Mater was attested by a provision in his will giving to the College \$30,000 for the library fund, together with his own library of somewhat more than 6,000 volumes. His own library, with its careful selection of standard works in theology and in literature, many of them in choice editions and elegant bindings, is a silent witness to its owner's breadth of scholarship and elegance of taste. In the large gift with which he has enriched the library fund, he showed his appreciation of what is at present the greatest need of the College. In the institution which he loved, his noble gift will be his fit memorial.

WILLIAM NORTH RICE.

RECENT COLLEGE APPOINTMENTS.

The list of Wesleyan graduates recently appointed to college positions, which has heretofore appeared in the spring number of the BULLETIN, has been transferred to the fall, in order that such appointments may be announced more promptly. Any corrections or additions will appear in the next issue.

CLASS.

1868. Ensign McChesney, Professor of Esthetics and the History of Fine Arts, and Dean of the College of Fine Arts, Syracuse University.
1871. Edgar Moncena Smith, President of Illinois Wesleyan University.
1876. Angie Villette Warren Perkins, Acting Dean, Woman's Department, University of Tennessee.
1881. Elmer Truesdell Merrill, Professor of the Latin Language and Literature for 1898-99, American School of Classical Studies in Rome.
1888. Harry Keiser Munroe, Professor of English Language and Literature, Allegheny College.
1891. Albert Elmer Hancock, Instructor in English, Haverford College.
1891. Frederick Allen King, Instructor in English Literature, Smith College.
1891. Harry Monmouth Smith, Adjunct Professor of Physical Science, Hampden Sidney College.
1892. Edward Loranus Rice, Professor of Zoölogy, Ohio Wesleyan University.
1892. Olin Freeman Tower, Instructor in Chemistry, Adelbert College, Western Reserve University.
1893. Vida Frank Moore, Fellow in Philosophy, Cornell University.
1893. Ashley Horace Thorndike, Instructor in English, College for Women, Western Reserve University.
1894. Abraham Howry Espenshade, Instructor in English, State College, Pennsylvania.
1894. Charles Hubbard Judd, Professor of Experimental Psychology, School of Pedagogy, New York University.
1894. Edwin Bryant Nichols, Assistant Professor of Modern Languages, University of Maine.
1894. William Leonard Snow, Instructor in Mathematics and History, Boston University.
1895. Edward Lee Thorndike, Instructor in Pedagogy, Western Reserve University.
1897. Ferris Greenslet, University Scholar in English Literature, Columbia University.
1898. Warren Lanning Hoagland, Jr., University Scholar in Social Science, Columbia University.
1898. Arthur Wellington Price, Assistant in English, University of the State of Maine.

CALENDAR.

1898.

- Sept. 29, Thursday, 9:00 A. M.,—College year began.
Nov. 23, Wednesday, 12:00 M.,—Thanksgiving Recess began.
Nov. 27, Sunday, 8:50 A. M.,—First chapel exercise after the close of the
Thanksgiving Recess.
Dec. 23, Friday, 12:00 M.,—Christmas Recess will begin.

1899.

- Jan. 4, Wednesday, 8:00 A. M.,—Christmas Recess will end.
Jan. 26, Thursday,—Day of Prayer for Colleges.
Feb. 6, Monday,—Feb. 18, Saturday,—Mid-year Examinations.
Feb. 22, Wednesday,—Washington's Birthday, a holiday.
Mar. 29, Wednesday, 12:00 M.,—Spring Recess will begin.
April 4, Tuesday, 8:00 A. M.,—Spring Recess will end.
April 20, Thursday,—Junior Exhibition.
June 28, Wednesday,—COMMENCEMENT.



—THE—

Wesleyan University Bulletin.

MIDDLETOWN, CONN.

JUNE, 1899.—No. 24.

READERS of this BULLETIN hardly need to be reminded that the great Twentieth Century Thank Offering Movement affords an opportunity to place Wesleyan among the best endowed colleges of the country. The Trustees, at their last meeting, authorized a movement to raise \$150,000 for a new recitation and administration building and \$1,000,000 for the general endowment fund. Such a movement is likely to succeed in proportion to the zeal with which alumni and friends of Wesleyan keep the interests of the University before the attention of men and women of wealth.

It must not be forgotten that the constant growth of the institution makes necessary a corresponding increase of the general endowment if we are to maintain our relative rank among the colleges of New England. Special needs, too, are continually arising. These special needs are noted from time to time in the BULLETIN, and some are emphasized in the present issue. Not every loyal friend of Wesleyan is prepared to make large gifts, but every one may embrace fitting opportunities to call attention to the advantages of the University and to the importance of sustaining a representative institution like Wesleyan at the point of highest efficiency. If such opportunities are not readily presented, there may, nevertheless, be important results secured for the University by sending to the President the names of those who might reasonably take an interest in the prosperity of the oldest college under the patronage of the Methodist Episcopal Church.

After several years of unofficial agitation the question of coeducation at Wesleyan is to be investigated by an officially appointed committee. This committee is to consist of four members of the Board of Trustees, two Alumni, and

two members of the Faculty, besides the President. The representatives of the Alumni will be appointed at the coming Commencement. It is evident, therefore, that there should be as large an attendance of the Alumni as possible at the annual meeting in order to secure a proper discussion of this very important subject.

For the last two or three years a series of important changes in the curriculum has been under discussion by the Faculty, with a view to relieving somewhat the congestion of studies in the Sophomore and Junior years of the course. The result of the discussions was formulated in a plan which was presented to the Trustees at their last meeting for approval. Some of the proposed changes seemed, in the brief time that could be given to the consideration of the matter in the Trustee meeting, to be undesirable. The whole plan was therefore recommitted to the Faculty for further consideration, and it will again be presented, with some modification, to the Trustees for final action next June. The announcement of courses to be given next year will therefore be delayed until after Commencement, when the pamphlet containing the course of study will be printed and sent by mail to each student.

The needs of the Library seem to be ever with us. For several successive years appeals have been made with the hope of completing the endowment fund of \$50,000, but nevertheless the entire library fund now in the hands of the treasurer of the University amounts to only \$24,289.33.

It is obvious that this sum, even when supplemented by Dr. Hunt's bequest of \$30,000, is altogether inadequate for the purchase of large and important sets of books, such as the publications of learned societies, or the series of journals and reviews that have become indispensable in advanced work. Books of this sort must usually be purchased in complete sets, and they range in price from one hundred to four or five hundred dollars each. In many instances these books are the primary authorities in the departments to which they belong.

We must emphasize the fact that the present demands upon a college library are very different from the demands of a generation ago. In the days when all of the college work consisted of text-book recitations, there was small need for any except secondary authorities, that is, books based upon primary authorities. In the lower classes the condition of things even yet is not greatly changed.

But within the past twenty-five years methods of instruction have been so developed that in advanced elective classes students are more and more taught to investigate for themselves. Students in the scientific departments are instructed in the methods of analysis and of comparison by direct study of specimens. Yet even here a wide range of scientific literature is of high importance. In the departments of history, of literature, of economics, the primary authorities are indispensable. The work of investigation on the part of undergraduates must of course begin in a small way, but it must obviously be checked at the outset if the fundamental materials for investigation are not accessible. The need of books that contain sources of information becomes more pressing as the courses progress. Graduate students who are expected to prepare theses that shall be a real contribution to knowledge must evidently base their investigations upon original materials.

What has been said concerning graduate and undergraduate students applies with still greater force to members of the Faculty. The modern college professor must keep abreast of the publications in his own department; but this he can hardly do if he has to provide expensive original authorities out of his own pocket or with the money coming in yearly from a small library fund. He is expected to produce original work of some sort, but he cannot produce original work by merely transplanting information from secondary authorities to his notebooks.

There is, then, urgent need of a large and immediate increase of books such as have been described above; and these books must come mainly as special gifts or as the slow accumulation of years. The statement here made is not exaggerated, and it is presented as an indication of the most serious hindrance at present in the way of higher instruction at Wesleyan.

In view of these facts is it not reasonable to believe that there are friends of Wesleyan who would be glad to make specific gifts of some of the more important sets of books here referred to? Lists of such books can easily be obtained from the Librarian, or from the heads of the various departments.

Among the many other needs that our steady growth has forced upon us is that of a new building for recitation rooms and administration offices. For nearly thirty years we have added no new building for these purposes, although in the same period the size of the student body and of the Faculty has more than doubled.

Attention is particularly directed to the scheme for a college commons, which is fully explained on a following page. If the plan is carried out as contemplated, every student who wishes to avail himself of the privilege can be assured of excellent board at the lowest possible price. With the growing number of students who are not connected with any of the existing fraternities, some arrangement of the sort here indicated seems almost a necessity. The experience of the coming year will, as we hope, demonstrate its feasibility.

Leave of absence for the next collegiate year has been granted to Professor Armstrong, who will probably spend the greater portion of the time in study abroad.

The University sermon at the coming Commencement will be preached by Rev. Charles Cuthbert Hall, D. D., LL. D., President of the Union Theological Seminary.

TRUSTEE MEETING.

An adjourned meeting of the Board of Trustees of Wesleyan University was held in New York City, March 30, 1899, with twenty-two members present.

A committee to consider and report on the Relation of the University to the Higher Education of Women was ordered, said committee to consist of four Trustees, three members of the Faculty, and two Alumni. The trustees appointed are John E. Andrus, Stephen H. Olin, Cyrus D. Foss, and Joseph E. King.

The President of the Board, Judge G. G. Reynolds, was directed to appoint a committee of five to report on the "Twentieth Century Thank Offering" at the next annual meeting. Trustees were also appointed to represent the University at the several patronizing annual conferences and to request their aid in securing \$150,000 for an administration and recitation building and \$1,000,000 for additional endowment.

Raymond Dodge, Ph. D., was elected Associate Professor of Philosophy for a period of three years.

Hon. George G. Reynolds and Bishop Cyrus D. Foss were appointed to draft and report a suitable minute on the death of Rev. Albert S. Hunt, D. D.

DEPARTMENT NOTES.

In view of the proposed changes in the curriculum, the usual announcements for the coming year are withheld by the departments of Latin, Greek, English Literature, English Language, History, and Economics.

GERMAN.—Courses I.–IV. will be given as usual in 1899–1900. A course in Middle High German (VI.), elective for those who have taken Courses I.–III., will be given twice a week during the first half-year. Course V. (Goethe and Schiller) will be omitted in 1899–1900, and its place will be taken by two courses extending each over one half-year, two hours weekly. One of these will be Course VII.: The History of German Fiction, and the other, a new elective, open to those who have taken Courses I.–III., viz.: The History of German Literature. The literature of the eighteenth century will receive special attention in this course. The class readings will include Lessing's *Nathan der Weise*, six cantos of Klopstock's *Messias*, and a representative work of the "Storm and Stress Period."

ROMANCE LANGUAGES.—Certain changes in the courses offered in this department will be made the coming year. Both I. and II. Italian will be given, and arrangements will be made for those who desire to elect both V. and VI. French. The course in VII. French will not be given next year.

PHILOSOPHY.—I. Among the more important additions made to the equipment of the Psychological Laboratory, during the current year, are the following: a falling exposition screen; a Wheatstone stereoscope and telestereoscope; a perimenter; a horizontal drum, for general registering purposes, with chronographic attachment; a dark box, for the simultaneous exposition of optical stimuli; a mirror contrast apparatus; and a pendulum tachistoscope, designed to serve as a control-hammer for the regulation of the chronoscope, as a so-called complication-pendulum, and as an apparatus for measuring the reaction time of the eye.

2. In the absence of Professor Armstrong, who will take his "Sabbatical year" in 1899–1900, the department will be in charge of Associate Professor Dodge. It is expected that the courses which in the Catalogue for 1898–99 are entitled I. Logic, II. Psychology, III. Physiological and Experimental Psychology, IV. Advanced Logic, VI. Ancient and Medieval Philosophy, VII. Modern Philosophy from the Renaissance to Kant, VIII. Modern Philosophy from Kant to the Present Time, will be given in 1899–1900 substantially as during the current year. Courses V. and IX.–XIII. will be omitted.

CHEMISTRY.—The investigations on the metabolism of matter and energy in the body and upon other subjects connected with the fundamental laws of nutrition, which have been going on for some years past in the chemical laboratory in coöperation with the United States Department of Agriculture and the Storrs Experiment Station, have been continued during the past year. The results of the work with the respiration calorimeter on the metabolism of energy in the body confirm those already announced, and are bringing more and more definite demonstrations of the action of the law of the conservation of energy in the living organism. The investigations upon the action of alcohol in the body, conducted under the auspices of the Committee of Fifty for the Investigation of the Drink Problem, have also been continued. The special questions

studied during the past year have had to do with the completeness of the oxidation of alcohol in the body and the comparative food values of absolute alcohol and of the alcohol in certain beverages, as whiskey and brandy. For meeting the expenses of these investigations, sums have been furnished from the treasury of the Committee of Fifty and also from the Bache and Elizabeth Thompson funds.

A small respiration calorimeter, as devised by Prof. Rosenthal, of the University of Erlangen, has been procured and is now in the calorimeter room of the chemical laboratory ready to be installed and used for investigations.

The coöperative nutrition investigations, of which Prof. Atwater has charge under authority of the Department of Agriculture, and of which some of the most important inquiries are being carried on in the chemical laboratory, are being prosecuted now in a considerable number of leading university and experiment station laboratories. A report of these inquiries is already in preparation to be used with a model of the respiration calorimeter as parts of the United States Government exhibit in Paris.

The chemical laboratory has received the following gifts: Aluminum, metal and castings from the Pittsburgh Reduction Co., Niagara Falls, N. Y.; manufactured articles from the Bay State Aluminum Co., Quincy, Mass.

A collection of specimens of Stassfurt Salts from the German Kali Works, New York, N. Y.

Specimens of Lubricating Oils from H. T. Alexander & Co., New York.

BIOLOGY.—The course of lectures upon Evolution (Course VII.) will be omitted next year and in its place will be given a course upon Bacteriology, one hour per week. This course will be open to all Juniors and Seniors.

In connection with Course VI. it is expected that a series of lectures will be given during the coming fall covering the subject of Histology.

FACULTY LECTURES AND PUBLICATIONS.

PROFESSOR RICE.—*Lectures*.—Genesis and Geology. Itinerants' Club of New York Conference, Sing Sing, N. Y., Oct. 5, 1898.

The Alternative: Christianity or Agnosticism. Itinerants' Club of New York Conference, Sing Sing, N. Y., Oct. 5, 1898; New Haven District Ministerial Association, Middletown, Conn., Feb. 28, 1899; Newark Conference, Newark, N. J., April 10, 1899.

Paleontology and Evolution. University Extension Centre, Sing Sing, N. Y., Nov. 10, 1898.

The Credibility of Miracle. University Extension Centre, Sing Sing, N. Y., Nov. 17, 1898.

Evolution: 1, The Evidences of Evolution; 2, The Bearings of Evolution on Ethics and Theology. Hamilton Theological Seminary, Hamilton, N. Y., Feb. 7, 8, 1899.

The Physical Geography of Connecticut. Bridgeport Scientific Association, Bridgeport, Conn., Feb. 20, 1899; Brooklyn Institute, Brooklyn, N. Y., April 3, 1899.

Volcanoes. Torrington, Conn., Feb. 27, 1899.

The Return to Faith. Methodist Social Union, Boston, Mass., April 24, 1899.

The Physical Geography of the Connecticut Valley. Geological Club, Springfield, Mass., April 28, 1899.

Publications.—A Suggestion in regard to the Theory of Volcanoes. *Proceedings of American Association for the Advancement of Science*, 1897.

Recent Phases of Thought in Apologetics. *Methodist Review*, Jan.-Feb., 1899.

William Rice. A Memorial. [Edited by William North Rice and Charles Francis Rice.] Cambridge, 1898, pp. vi. + 152.

PROFESSOR ATWATER.—*Lecture.*—Food in its Commercial and Sociological Relations. The Commercial Club of St. Louis, Mo., January, 1899.

Publications.—Studies of Dietaries (with A. P. Bryant). *Year-Book of the U. S. Department of Agriculture*, 1898.

Dietary Studies in New York City in 1895 and 1896 (with C. D. Woods), *Bulletin No. 46, Office of Experiment Stations, U. S. Department of Agriculture*, 1898, p. 117.

Dietary Studies in Chicago (with A. P. Bryant). *Bulletin No. 55, Office of Experiment Stations, U. S. Department of Agriculture*, 1898, p. 76.

PROFESSOR WINCHESTER.—*Lectures.*—The Educational Value of the Study of English Literature. Rhode Island State Teachers' Association, Providence, October, 1898.

Six Lectures on English Literature of the Victorian Period, New Haven University Extension Society, October–November, 1898.

Three lectures before the Mid-Year Meeting of the Rock River Conference, Chicago, March 28, 29, 30, 1899.

The Teaching of John Ruskin. Address before the New York East Conference, April 10, 1899.

Single lectures in Springfield, Mass., Holyoke, Mass., Scranton, Pa., Norfolk, Va., and in various other places.

Publications.—The following volumes have appeared during the year in the Athenæum Press Series of English Classics, under the editorial direction of Professor G. L. Kittredge, of Harvard University, and Professor Winchester:

Cowper. Edited by the late Professor James O. Murray, of Princeton University.

Burns. Edited by the late John G. Dow, Instructor in the University of Wisconsin.

Landor. Edited by W. B. Shubrick Clymer.

Collier. Edited by Professor W. C. Bronson, of Brown University.

PROFESSOR CONN.—*Lectures*.—Modern Bacteriological Methods. Brooklyn Institute, Nov. 14.

Studies in Protoplasm. Mid-Year Assembly of the N. Y. East Conference at Stamford, Nov. 1.

Bovine Tuberculosis in Europe. Annual Meeting of the State Board of Agriculture at Hartford, December 13.

Milk Supply in European Cities. State Dairymen's Association, Hartford, Jan. 20.

Studies in Protoplasm. Yale Philosophical Club, March 21.

Publications.—Story of Germ Life. D. Appleton & Co.

Protoplasm Past and Present. *Popular Science*, January, 1899.

The Malarial Organism. *Popular Science*, April, 1899.

Review of Hueppes Principles of Bacteriology. *Science*, April, 1899.

Is there a Solution of the Nitrogen Problem? *Annual Report of Penn. Board of Agriculture*, 1898.

The Present Condition of Bovine Tuberculosis in Europe. *Bulletin No. 19 of the Storrs Experiment Station*.

The Present attitude of European Science toward Tuberculosis in Cattle. *Annual Report of the Storrs Experiment Station*, 1898.

Some Practical Applications of Bacteriology in European Dairying. *Annual Report of Storrs Experiment Station*, 1898.

PROFESSOR ARMSTRONG.—*Lectures*.—The New Psychology. Middlesex Congregational Association, Ivoryton, Conn., June 7, 1898.

Thought and Social Movements. Mid-Year Assembly, New York East Conference, Stamford, Conn., Nov. 2, 1898.

The Relations of Will to Belief. American Psychological Association, Dec. 28, 1898.

Publications.—Review of Titchener's *Primer of Psychology*. *Psychological Review*, September, 1898.

Consciousness and the Unconscious. *Psychological Review*, November, 1898.

Review of Mivart's *Groundwork of Science*. *Psychological Review*, January, 1899.

The Constructive Value of History and Science. *Methodist Review*, May-June, 1899.

PROFESSOR MEAD.—*Publications*.—Outlines of the History of the Legend of Merlin. London, 1899, pp. ccxlvii, 8°. (Early English Text Society.)

Color in Old English Poetry. *Publications of the Modern Language Association of America*, Vol. VII., No. 2.

Review of Kluge and Lutz's English Etymology. *Journal of Germanic Philology*, Vol. III., 1899.

MR. JAMES.—What proportion of its funds is a college library justified in devoting to current periodicals? Paper read before the college section at the

twentieth general meeting of the American Library Association, held at Lakewood-on-Chautauqua, N. Y., July 7, 1898. Published in the Proceedings and Transactions of the meeting; Library Journal, Sept., 1898.

PROFESSOR PATON.—Notes on Greek Inscriptions. Paper read before the American Philological Association at Hartford, July, 1898. Proceedings of American Philological Association, Vol. 29, p. xxxiii.

Publications.—The Myth of Alcestitis in Ancient Art, in The Alcestitis of Euripides, edited by H. W. Hayley, pp. li.-lxxxv.

PROFESSOR E. B. VAN VLECK.—On the Determination of a Series of Sturm's Functions by the Computation of a Single Determinant. Paper read before the American Mathematical Society, New York, Feb. 25, 1899.

Publications.—On the Polynomials of Stieltjes. *Bulletin of the American Mathematical Society*, June, 1898.

On Certain Linear Differential Equations of the Second Order allied to Hermite's Equation. *American Journal of Mathematics*, April, 1899.

PROFESSOR KUHN, — *Lectures.*—Dante's Purgatory and Paradise. The Dante Club of Windsor, Conn.

The Divine Comedy. The New Haven District Preachers' Meeting, Middletown, Conn.

The use of Animals in Ecclesiastical Architecture. The Archdeaconry of Connecticut, Middletown.

Publications.—Paul et Virginie, with Introduction and Notes. H. Holt & Co.

Cyrano de Bergerac, with Introduction and Notes. H. Holt & Co.

Dante's Influence on Shelley. *Modern Language Notes*, June, 1898.

Literary Influence of Mediaeval Zoölogy. *Poet Lore*, April, 1898.

PROFESSOR ROSA.—Two Papers read before the British Association for the Advancement of Science, at Bristol, England, Sept. 8, and 9, 1898: 1. On the Conservation of Energy in the Human Body. (Prof. W. O. Atwater joint author.) 2. On Dielectric Hysteresis in Condensers. (Mr. A. W. Smith joint author.)

Lecture.—Electricity and Lightning. Public Library, Branford, Conn., Jan. 11, 1899.

Publications.—A Resonance Method of Measuring Energy Dissipated in Condensers. *Physical Review*, January, 1899.

A Calorimetric Determination of Energy Dissipated in Condensers. *Physical Review*, February, 1899.

(These two papers were read before the American Association for the Advancement of Science, Boston, 1898, by Mr. A. W. Smith, joint author.)

On the Derivation of the Equations of a plane Electromagnetic Wave. *Physical Review*, May, 1899.

DR. HAYLEY.—*Publications*.—The *Alcestis* of Euripides, edited with an Introduction and Critical and Exegetical Notes. Ginn & Co., 1898.

The chapter on Versification in Lane's Latin Grammar. Harpers, 1898. This work was done in accordance with a request left by Professor Lane, who died before the book was completed.

PROFESSOR FAUST.—Courses and lectures on German Literature at the Martha's Vineyard Summer Institute, Cottage City, July and August, 1898.

PROFESSOR FARRAND.—*Address*.—The Teaching of History in Secondary Schools. Connecticut Association of Classical and High School Teachers, Hartford, Feb. 25, 1899.

Publications.—The Delaware Bill of Rights of 1776. *American Historical Review*, July, 1898.

Reviews in *The Citizen*, 1898.

DR. BENEDICT.—Paper on The Metabolism of Alcohol in the Human Body. Read before the American Association for the Advancement of Science, Boston, August, 1898 (in conjunction with W. O. Atwater).

Publication.—The use of compressed oxygen in elementary organic analysis, and of soda lime in the quantitative determination of carbon di-oxide (in conjunction with O. F. Tower). *Journal of the American Chemical Society*, May, 1899.

DR. LING.—An Examination of Groups whose orders lie between 1093 and 2000. Paper read before the American Mathematical Society, Feb. 25, 1899.

COLLEGE LECTURE COURSE.

The lecture course during the current year has comprised a series of lectures given by members of the college faculty, and in addition the following special lectures:—

Dec. 8.—Society and the Criminal. Charles Dudley Warner.

Feb. 18.—Civil Service Reform. Hon. J. R. Procter, President of the U. S. Civil Service Commission.

Apr. 15.—The Liberty and Duty of Biblical Criticism. Dr. George Adam Smith, Professor of Hebrew and Old Testament Exegesis in the Free Church College, Glasgow.

The faculty lecture course was as follows:—

Dec. 20.—Modern Italy. Professor H. W. Conn.

Jan. 17.—Pompeii. Professor F. W. Nicolson.

Jan. 31.—Richard Bentley, Scholar and Critic. Dr. H. W. Hayley.

Mar. 7.—The Close of Skeptical Eras. Professor A. C. Armstrong, Jr.

MIDDLETOWN SCIENTIFIC ASSOCIATION.

The following subjects have been discussed at the meetings of the Association since the last report in the BULLETIN:—

June 14, 1898.—“War Vessels,” W. P. Bradley.

“Arms and Ammunition,” F. G. Benedict.

“Electricity in Naval Warfare,” E. B. Rosa.

Oct. 11.—“Physics at the Bristol meeting of the British Association for the Advancement of Science,” E. B. Rosa.

Nov. 8.—“Malaria,” H. W. Conn.

Dec. 13.—“A trip to Fossil, Wyoming, and Florissant, Colorado,” S. W. Loper.

“Geographical conditions of North America during Tertiary time,” W. N. Rice.

Jan. 12, 1899.—“Liquid Air,” W. P. Bradley.

Feb. 14.—“Some Odd Opinions of an Eminent Scientist,” F. W. Nicolson.

“The Nutritive Value of Beef Tea and Beef Extracts,” W. O. Atwater.

“Notes on the Probable Identity of Electricity and Light,” M. B. Crawford.

Mar. 14.—“Aluminium,” F. G. Benedict.

May 9.—“The Scientific Side of the Study of Languages,” W. E. Mead.

“The Cooling of Gases by Expansion, with remarks on the Absolute Zero of Temperature,” E. B. Rosa.

THE APOSTLES CLUB.

The Club has held its regular monthly meetings through the college year. The list of subjects and speakers is as follows:—

October.—*Professor Armstrong*: “The Relation of Social Movements to Thought.”

November.—*Professor Farrand*: “Outline of a Course in the Study of Governments.”

December.—*Professor Nicolson*: “The Art of Translation.” *Dr. Hayley*: “Ancient Classical Music.”

January.—*Professor Kuhns*: “Cyrano de Bergerac.”

February.—*Dr. Starks*: “The Synoptic Problem.”

March.—*Professor Faust*: “Heine,—his Life and his Place in Literature.”

April.—*Professor Mead*: “The New English Dictionary and some of its Predecessors.”

May.—*Professor Paton*: “The Oxyrhynchus Papyri.”

RECENT GIFTS.

The late Rev. Daniel Wise, D. D., has left to the University a bequest of \$10,000 on which an annuity is to be paid during the life-time of his daughter. By the terms of the gift it is to be devoted to books and scientific equipment.

About \$1,675 has been paid in on the Library Endowment Fund since the last issue of the BULLETIN.

Cyrus D. Jones, of Scranton, Pa., has given \$1,000 toward the chapel improvements. The new memorial window to the first four presidents of the University is the gift of Daniel H. Chase, LL. D.

Mrs. P. L. Bennett, of Wilkes-Barre, Pa., has given \$350 for furnishing the Ladies' Dormitory.

Attention should also be called to gifts to the Museum and Chemical Laboratory which are mentioned elsewhere in the BULLETIN.

JUNIOR EXHIBITION.

The Annual Junior Exhibition was held in Memorial Chapel on the evening of Thursday, April 20. The judges were Rev. Levi Gilbert, D. D., of New Haven, Principal Frank Prescott Moulton, M. A., of Hartford, and Rev. Azel Washburn Hazen, D. D., of Middletown. The first prize was awarded to Horace Durar Byrnes, of Southold, N. Y., whose subject was "Dawn on the Hills of T'ang," and the second prize to Walter Browne Wilson, of Freeport, N. Y., who discussed "The Evils of the Present Tendency to Monopoly."

THE YOUNG MEN'S CHRISTIAN ASSOCIATION.

During the year the work of the Y. M. C. A. has held a prominent place in the college life. Fifty-nine active and nine associative members were added to the Association, making a total membership of two hundred and three, or seventy-eight per cent. of the male members of the College.

The religious meetings have been well supported. One hundred and thirty meetings were held, the total attendance being four thousand six hundred and five. Monthly union class meetings conducted by members of the faculty have been so beneficial that they will be a fixture hereafter. The average attendance has been one hundred and five. Two series of special services were held. The November Week of Prayer services, conducted by Mr. S. M. Sayford, laid special emphasis on a pure moral life. The Annual Day of Prayer sermon was preached by Bishop Foss, and the series of meetings held at this time was marked by deep interest.

The classes in Bible Study for the Freshmen and Sophomores have held weekly sessions throughout the year. About thirty are enrolled in these classes. The Mission Study Class, with a membership of sixteen and average attendance of ten, has prosecuted weekly systematic study of missions. The increasing interest in missions has this year enabled the Association to undertake the support of its own representative in the foreign field. The Wesleyan students have pledged about four hundred dollars a year. The balance will be contributed by preparatory schools standing in especially close relations with the University. Deputations have been sent to Hackettstown, Pennington, East

Greenwich, and Wilbraham, and about two hundred and fifty dollars a year has been pledged. The fourteenth anniversary service, held April 5th, was of a missionary character. Mr. Robert P. Wilder, of India, the originator of the Student Volunteer Movement for Foreign Missions, delivered the address on "The Relation of the Student to the Evangelization of the World."

Over sixty students have engaged in neighborhood work. One hundred and nine services have been conducted, and four hundred and twenty-five classes taught. Visitation has been carried on among the poor of the city, and clothing, contributed by the students, has been distributed to the needy.

The annual reception given in honor of the Freshman Class was held in the College gymnasium, Oct. 11th, 1898.

LIBRARY.

Since the publication of the last BULLETIN the remainder of Dr. Hunt's library has been received. It contains, in all, 5,309 bound volumes, 2,476 pamphlets, and several hundred copies of daily and weekly papers. A careful inspection of this library has shown it to be even more valuable than it seemed at first sight.

Mrs. Caroline L. Rice has presented a considerable number of books and pamphlets from the library of her husband, Dr. William Rice. These books are especially welcome as having belonged to a valued friend, trustee, and patron of the University.

In addition to Dr. Hunt's books there have been presented to the Library from May 1, 1898, to April 30, 1899, 968 bound volumes and 5,123 pamphlets. The principal donors were the United States Government, the Connecticut State Library, the Massachusetts Bureau of Statistics of Labor, the Wyclif Society, A. C. Armstrong, Jr., F. G. Benedict, W. P. Bradley, H. A. Chapman, M. Farrand, C. D. Hine, A. A. Howard, J. M. Paton, J. W. de Peyster, Hon. O. H. Platt, Mrs. Caroline L. Rice, W. N. Rice, '65, B. A. Rich, '78, Hon. N. D. Sperry, C. T. Winchester, '69.

From November 1, 1898, to April 30, 1899, the sum of \$1,006 has been received on account of subscriptions to the Alumni Library Endowment. The library endowment fund in the hands of the Treasurer of the University amounts to \$24,289.33.

The last BULLETIN called attention to the introduction of electric lights, and to an increase in the number of hours the Library was open. Early in December the Library hours were again extended. The Library building is now open from 8.15 A.M. to 10 P.M. every week day in the college year. As a result, the use of the Library has steadily increased. From October, 1898, to April, 1899, inclusive, 7,089 persons used the Library during the additional hours, 4 P.M. to 10 P.M. During the same months there were more books taken from the Library for home use than during the same months of the preceding college year, although "reserved" books can no longer be taken out. A comparison

between the classes of books allowed to circulate during both years shows an increase for the present year of eleven per cent. The introduction of electric lights and the opening of the Library for a longer time each day have proved unqualifiedly successful.

THE MUSEUM.

In the last BULLETIN mention was made of the large and valuable collections of fossils obtained by Mr. Loper last summer in Wyoming and Colorado. During the year additional cases have been placed in the lower hall of the Museum, and some rearrangement of the collection of fossils has been made, so as to place on exhibition a considerable part of the new material.

The collection of minerals and other specimens belonging to Mr. John A. Waterman was offered to the Museum by the owner for the low price of seventy-five dollars. The money was promptly contributed by citizens of Middletown. The collection includes about two thousand specimens, among which are many of the beautiful green tourmalines and associated minerals from Haddam Neck.

An interesting series of cameos has been contributed by Simons, Brother, & Co., of Philadelphia.

Contributions in money have been received as follows (in addition to the amount raised for the Waterman collection):—R. C. Penfield, of New York, \$25; M. W. Terrill, of Middletown, \$25; Mrs. C. L. Rice, of Springfield, Mass., \$100. These contributions have been applied toward the purchase of the collection of Indian relics from Chattanooga deposited in the Museum by Mr. A. R. Crittenden. The whole amount advanced by Mr. Crittenden in 1896, for the purchase of the Barnes collection of Indian relics, and for the expense of Mr. Loper's tour for the collection of fossils undertaken in connection with the journey to Chattanooga, was a little more than thirteen hundred dollars. About five hundred dollars of that sum still remains unpaid, but it is hoped that the amount may be raised at an early date.

CHANGES IN REQUIREMENTS FOR ADMISSION TO THE LATIN-SCIENTIFIC AND THE SCIENTIFIC COURSE.

LATIN-SCIENTIFIC COURSE.—The following changes have been made in the requirements for admission to this course, to go into effect in 1900:—

I. The number of elective courses to be selected from the list given on page 30 of the Catalogue for 1898-99, is increased by one.

II. The course in Mathematics of the Freshman year is added to the list of alternatives.

The requirements for the Latin-Scientific Course, as thus increased, may be summarized as follows: Latin, Ancient History and Geography, Elementary Mathematics, and English, same as in Classical Course; four additional courses

to be selected from the following list, provided that every candidate must take Elementary French or Elementary German:—

1. Elementary French (counting as two courses).
2. Elementary German (counting as two courses).
3. Advanced French.
4. Advanced German.
5. Advanced Mathematics (counting as two courses).
6. Physical Geography and Botany.
7. Physics.
8. Chemistry.
9. History of England and of the United States.

SCIENTIFIC COURSE.—The following changes have been made in the requirements for admission to this course, to go into effect in 1900:—

I. The number of elective courses to be selected from the list on pages 31 and 32 of the Catalogue for 1898-99, is increased by two.

II. A third year of Latin is added to the list of alternatives. The books to be read will be specified in the next Catalogue.

The requirements for the Scientific Course, as thus increased, may be summarized as follows: Elementary Mathematics and English, same as for the Classical Course; History of England and of the United States; eight additional courses to be selected from the following list, provided that every candidate must take Elementary French or Elementary German, and at least one course in Natural Science:—

1. Elementary Latin (counting as two courses).
2. Advanced Latin.
3. Advanced Mathematics (counting as two courses).
4. Elementary French (counting as two courses).
5. Elementary German (counting as two courses).
6. Advanced French.
7. Advanced German.
8. Physical Geography and Botany.
9. Physics.
10. Chemistry.

COLLEGE COMMONS.

Two conferences have been held recently by President Raymond with students interested in the formation of a commons, under the direction of the College authorities. At each meeting the details of the proposed scheme were discussed at some length, and at the close of the second session the President announced that he had received pledges of membership from a sufficient number of men now in college to justify him in proceeding with the arrangement for establishing the commons next year. The Trustees at their meeting in March listened to a presentation of the case from President Raymond, and expressed their approval of the general plan. The Foss house, now occupied by the Phi Rho Fraternity, will be used for the purpose, the upper rooms being rented as dormitories at a lower charge than is now made for the rooms in North College. Besides the dining room on the main floor, one or more rooms.

will be furnished to be used by the club for social purposes. The organization will be effected on the coöperative plan, and whatever profits there may be at the end of the year will be divided among the members. It is expected that the price of board will not exceed \$2.50 a week, and an effort will be made to keep the cost near \$2.00. The finances of the club will be managed by an official appointed by the College. The President has agreed to secure a matron and to arrange for the payment of her wages, thus reducing considerably the cost of board to the members. A small charge will be made to cover the rent and cost of furnishing. It is expected that food supplies can be bought for the club in considerable quantities, and that a buyer of experience can be secured, possibly a member of the club, who will in this way keep the prices at a low figure.

Those who have already agreed to join the commons on the above terms include members of fraternities as well as non-fraternity men. There is no doubt that the number will be increased by additions from the entering class, of those who will be glad of an opportunity to secure plain but wholesome food at a comparatively low cost, and to enjoy some social advantages at the same time, instead of being compelled to board themselves, as is frequently the case with poor men under existing conditions.

EXPENSES AT WESLEYAN, AND METHODS OF SELF-SUPPORT.

BY PROF. F. W. NICOLSON, SECRETARY OF THE FACULTY.

Among the first questions asked by young men contemplating a college course are usually "What will it cost?" and "What can I earn towards paying my expenses?" In order to be able to give a definite reply to these queries as respects conditions at Wesleyan, a circular was sent to all the men of the three upper classes, asking for a confidential statement as to their expenses in college, and an estimate of what they have been able to earn, during term-time or in vacations, to help them meet the expenses of a college course. Replies were received from 75 of the 160 men addressed. From what is known in general of the circumstances of the men now in college, it is safe to assume that answers were received from nearly all the students of the more needy class. Since not quite 50 per cent. of those addressed responded to the circular, and since the majority is known to comprise most of the men in college with liberal allowances, it would be manifestly unfair to consider the result of this partial investigation as of any value in deciding the upper limit of expenditure at Wesleyan. That question, however, is not of particular importance. Here, as at other colleges, a man can spend large amounts, if so disposed. The purpose of this investigation will be met if it can be shown that a considerable proportion of the students live at a moderate expense, and that a man who is really needy can if necessary reduce his expenditures to a very low figure, and can at the same time earn enough to pay most if not all of his bills for the college year.

In making a statement of expenses, students were asked to include all the expenses of the college year, except clothing and travelling; the expenses of vacation do not appear in the estimates. The figures include, then, tuition

and all college bills, room-rent, board, books, fraternity expenses, subscriptions to athletics, and all other expenditures except for clothing and travelling. The average amount spent in a college year was \$315.00. The estimate would be perhaps fairer if the item of tuition were excluded from the average, for under present arrangements this charge varies considerably with different men. Thus 30 of the 75 men in question held scholarships covering the whole charge for tuition, 23 paid \$10 each, 9 paid other amounts, ranging from \$15 to \$50, and only 13 paid the full charge of \$75. Deducting, then, the item of tuition, a charge from which "deserving students who need pecuniary assistance" are exempt if awarded a scholarship by the President, the average of all other expenses is found to be \$297.00. Fifty of the 75 men in question spent \$300 a year, or less, tuition not included. Only three spent more than \$400, the highest amount mentioned being \$1,000, including tuition. Thirteen spent \$200 or less, in each case securing a partial, if not a whole, tuition scholarship. The lowest figure reported is \$129, made up as follows: College bills, \$31; room-rent, \$19; board, \$24; books, \$25; fraternity expenses, \$30. This man boarded himself at a remarkably low cost; it is noticeable that he spent more on books than on board. Another man reports an expenditure for the year of \$175, \$25 of which was for tuition, and \$15 for books. A third spent \$150, a fourth \$185 and a fifth \$188; in the last three cases, the charge for tuition was in each case covered by a scholarship.

Of the separate items of expense, from \$10 to \$25 was spent by each man on books, and room-rent cost from \$20 to \$45. The chief item was, of course, board. Forty-three out of 75 men spent from \$3.25 to \$3.75 a week for board; 17 others reduced the expense to \$3 a week, or a little more. Of the others, only two spent more than \$3.75 a week, while 13 reduced the cost to less than \$3 a week. The fraternity commons seem to vary from \$3 to \$3.75 a week. The lowest club board obtained outside the fraternities seems to have cost \$2.50 a week; but nine men report that by boarding themselves they reduced the figures much lower, in four cases to \$1.75, \$1.50, \$1.15 and 60 cents each, respectively. The last figure seems almost unbelievable, yet it is asserted by the subject of the experiment that he had all the food he wanted and good food, though naturally with no great variety. It is hoped that the problem of providing plain but satisfactory food to the poorer students at a low cost will be solved at Wesleyan next year by the establishment of a "commons," under the general management of the college authorities.

In general, it may fairly be said, as a result of these inquiries, that a student at Wesleyan can live as well as nearly 50 per cent. of his fellows on \$350 a year, paying full tuition. Indeed, one man says "with \$250 and a tuition scholarship, I can have all I want." Furthermore, the experience of several men whose cases have been cited in detail shows that by rigid economy expenses may be reduced when necessary to \$200, \$150, or even \$130 a year.

The replies received to the questions in the circular of inquiry bearing on the earnings of individual students both in term-time and in vacation show very

conclusively, first, that Wesleyan is a college of workers, and secondly, that many students are able to earn a considerable amount towards defraying their expenses, and that some have earned enough and more than enough to pay all their college bills. On the first point, it need only be said that 60 of the 75 who replied to the letter of inquiry reported that they had earned something towards paying their expenses since they entered college. The amounts earned per year varied from a dollar or two to \$650. Some of the methods employed may be enumerated: tutoring, teaching in night school, preaching, clerking in store, agencies for laundries, athletic or furnishing supplies, etc., stewardships or janitorships in fraternity houses, work for the college office or the library, monitorships, newspaper work, stenography, singing in local churches, taking care of lawns or furnaces, selling farm produce imported from home, work in the various laboratories. To this list should be added canvassing, various employments at summer resorts, and clerking in hotels during the long vacation. Six men in the senior class report that they have earned \$950 or more each, during their college course; in one case the figure is \$1,950. A few typical examples, chosen from all three of the upper classes, may show what can be accomplished by those who are determined to succeed. One man reports that aside from his tuition scholarship he has received not a cent as a gift from anyone, and though he has to provide about \$100 a year over and above his personal expenses, he has made his way through college so far by his unaided exertions. He adds "Any person in good health can go to college if he will." Another has taken a month's vacation every summer, and yet has earned over \$1,000 since coming to college. A third had a fund of \$450 to draw on when he entered college, and will complete his course only \$60 in debt; he reports that it has not been as hard for him to make his way as he expected. One student has earned \$600 by stenography since he entered college; he declares that "a stenographer who cares to do so can earn \$200 during term-time at Wesleyan each year." The earnings of another man have amounted to the following sums for the four years of his course respectively, \$150, \$415, \$640, \$510; a third of these amounts was received for caring for furnaces, etc.; in addition \$235 was earned in vacations. Canvassing for stereoscopic views during the summer paid one man approximately \$900 for three vacations. Another series of earnings for the four years is \$150, \$345, \$250, \$270. One man has kept his expenses very low by obtaining board and room in return for work as clerk in a local hotel; he has brought back about \$100 each year, the earnings of the summer vacation, and has been able to support himself and buy more books than would be expected of a man of his means. Two men report that they earned \$100 or more each during a summer vacation by acting as telegraph operators. Another has netted between \$125 and \$130 above all expenses by serving as hotel clerk in the vacations.

If it were possible to secure statements concerning their earnings during the college course from graduates, there can be no doubt that the possibilities could be presented in an even stronger way. (One alumnus writes, for instance, that, by a combination of a number of the methods above enumerated, he cleared

\$3,075 during the four years of his college course.) Enough facts have however already been given to show that opportunities for self-help at Wesleyan are not few, and that success depends only upon the spirit of the man who seeks work, and his adaptability to the conditions. A poor man may always have the assurance that his efforts to support himself will be regarded with favor by his fellow-students. There are no false standards of society in this democratic community; the hard-working man of slender means is to be found in every fraternity, and he lacks none of the social and intellectual advantages of his more fortunate brother. Naturally, his college work suffers somewhat from the demands of his self-imposed labor; but the instances are not few, indeed one or more may be found in every class that graduates, of the combination of earnest self-denying labor, and successful, even brilliant scholarship.

OBITUARY RECORD.

The following deaths among the Alumni have been reported since the publication of the last Obituary Record:

CLASS.

1839. Ichabod Marcy, b. 16 July, 1811, in Leyden, Mass.; d. 20 March, 1899, in Ashmont, Mass.
1839. James Lodowick Phelps, b. 4 October, 1819, in New York, N. Y.; d. 3 November, 1898, in Brooklyn, N. Y.
1842. James M. Quinlan, b. 28 August, 1821, in Seward, N. Y.; d. 3 June, 1898, in Newark, N. J.
1846. Oliver Marcy, b. 13 February, 1820, in Coleraine, Mass.; d. 19 March, 1899, in Evanston, Ill.
1847. James Rogers, b. 28 September, 1818, in Cambria, N. Y.; d. 15 May, 1898, in Crestview, Fla.
1848. Ralza Morse Manly, b. 16 January, 1822, in Dorset, Vt.; d. 16 September, 1897, in San Diego, Cal.
1849. Lorenzo Marshall, b. 7 April, 1824, in Beekmantown, N. Y.; d. 4 August, 1898, in Glens Falls, N. Y.
1851. Albert Sanford Hunt, b. 3 July, 1827, in Amenia, N. Y.; d. 11 September, 1898, in New York, N. Y.
1853. Benjamin Franklin Burnham, b. 2 November, 1830, in Groton, Vt.; d. 21 May, 1898, in Boston, Mass.
1854. John Wesley Selleck, b. 26 November, 1829, in Hyde Park, N. Y.; d. 27 October, 1898, in New York, N. Y.
1856. Charles Henry Payne, b. 24 October, 1830, in Taunton, Mass.; d. 5 May, 1899, in Clifton Springs, N. Y.
1857. Albert Doughty Vail, b. 1 January, 1835, in Verbank, N. Y.; d. 22 November, 1898, in New York, N. Y.
1860. Henry Robinson Blaisdell, b. 1 November, 1836, in Virginia; d. 14 March, 1899, in Covington, Ky.
1860. Samuel Augustus Winsor, b. 6 July, 1835, in Johnson, R. I.; d. 17 March, 1899, in Montrose, Col.

CLASS.

1866. George Gary Bush, b. 19 March, 1843, in Turin, N. Y.; d. 15 October, 1898, in Malden, Mass.
1869. Alden Fitzroy Chase, b. 26 October, 1842, in Woodstock, Me.; d. 21 October, 1898, in Kents Hill, Me.
1878. William Enos Walkley, b. 21 February, 1856, in Durham, Conn.; d. 20 May, 1898, in Belleview, Fla.
1881. John Bell Scott, b. 17 February, 1861, in Philadelphia, Penn.; d. 16 July, 1898, in Philadelphia, Penn.
1891. Charles Wilfred Savage, b. 4 January, 1867, in Berlin, Conn.; d. 24 March, 1898, in Perris, Cal.
1892. Alfred Cookman, b. 15 July, 1870, in Wilmington, Del.; d. 14 September, 1898, in Philadelphia, Penn.
1893. Albert Emory Loveland, b. 30 November, 1869, in Vernon, Conn.; d. 8 April, 1899, in Waverly, Mass.
1896. Louis Arthur Norris, b. 25 October, 1874, in Lowell, Mass.; d. 11 October, 1898, in Montpelier, Vt.
1896. George Dallas Thompson, b. 21 February, 1874, in Camden, N. J.; d. 5 October, 1898, in Bridgeton, N. J.

CALENDAR.

1899.

- June 1, Thursday, 7:30 P. M.,—Junior Prize Debate.
- June 23, Friday, 7:30 P. M.,—Freshman, Sophomore, and Junior Prize Declamation.
- June 25, Sunday, 10:30 A. M.,—Baccalaureate Sermon, Rev. Bradford Paul Raymond, D. D., LL. D.
- June 25, Sunday, 7:30 P. M.,—University Sermon, Rev. Charles Cuthbert Hall, D. D., LL. D., President of Union Theological Seminary.
- June 26, Monday, 11:00 A. M.,—Public Awarding of Prizes.
- June 26, Monday, 2:00 P. M.,—Class Day Exercises.
- June 26, Monday, 8:00 P. M.,—Annual Meeting of Board of Trustees.
- June 26, Monday, 8:00 P. M.,—Glee Club Concert.
- June 27, Tuesday, 9:00 A. M.,—Meeting of the Φ. B. K. Fraternity.
- June 27, Tuesday, 10:00 A. M.,—Business Meeting of the Alumni Association.
- June 27, Tuesday, —Reunions of Classes of 1849, '54, '59, '74, '84, '89, '92, '96.
- June 27, Tuesday, afternoon,—Reception by the College Fraternities.
- June 28, Wednesday, 10:00 A. M.,—Commencement.
- June 28, Wednesday, afternoon,—Commencement Dinner.
- June 28, Wednesday, evening,—President's Reception.
- June 29, Thursday, 9:00 A. M.,—Examination of candidates for admission begins.
- Sept. 27, Wednesday, 9:00 A. M.,—Examination of candidates for admission begins.
- Sept. 28, Thursday, 9:00 A. M.,—First Term begins.

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WESLEYAN UNIVERSITY BULLETIN.

MIDDLETOWN, CONN.

NOVEMBER, 1899.—NO. 25.

WE have this year to announce, as for several years past, that the number of students is greater than ever before. The total number this year is 338, as against 331 last year. This year there are 99 Freshmen, of whom 7 are women: last year there were 104 Freshmen, of whom 24 were women. There is, then, a gain of 12 men in the Freshman class. The total number of women this year is 62,—a loss of 13. The total number of men is 276,—a gain of 20. Special students have decreased from nine to four. Graduate students have increased from seven to fifteen.

The extensive changes in the curriculum which were awaiting at the time of the issue of the last BULLETIN the action of the Board of Trustees were approved last June, and are detailed in the announcement of the Courses of Instruction for the present year. Under the new arrangement, Greek, Latin, and Mathematics are made entirely elective in the Sophomore year, of the Classical Course, although in making up the requisite quota of hours most students will elect one of these three subjects. Required Physics and Chemistry are slightly reduced in amount. Sophomore Rhetoric is transferred to Freshman year, the Freshman course in English reading being dropped, and the course in Old English made elective in Sophomore year. English Literature, History, and, with some restrictions, Economics, are now for the first time made elective for Sophomores. Some minor changes appear, too, in the courses of the Junior and Senior years.

These changes were made with some hesitation, for it was felt that if the classics and mathematics were made entirely elective they might be unduly neglected. A tabulation of the studies elected this year shows, however, that the classics have neither gained nor lost; while mathematics has made a very

slight gain. If the elections in all departments of the college are compared with the elections of last year, there appears a considerable gain for the so-called humanities.

The organization of the movement in the Methodist Episcopal Church to raise twenty millions of dollars as a Twentieth Century Thank-offering is being perfected. This movement is to continue until January 1, 1902. A large proportion of the money is expected to be devoted to educational work; and Wesleyan must not be forgotten. Emphasis must be laid upon the fact that no money at all will come to Wesleyan unless given for that express purpose. There is no general fund in which educational institutions are to share proportionately, but all gifts are designated as given for a definite object. It is evident, therefore, that the friends of Wesleyan must use their personal influence if the University is to receive its fair proportion of the fund.

Some of our urgent needs are the following:—

1. A new building to contain recitation rooms and administrative offices. No new building for these purposes has been added in nearly thirty years. A suitable building will cost from \$100,000 to \$150,000.

2. The completion of the Alumni Library Fund of \$50,000, and the endowment of special departments of the Library. All the books bought with the income of a special endowment fund would be marked with the name of the donor.

3. A new Physical Laboratory.

4. The addition of at least one million dollars to the general endowment fund. This is needed in order (1) to make possible the promotion of several members of the Faculty to permanent positions and the founding of new chairs in important departments; (2) to provide for the deficit due to falling rates of interest; (3) to meet the expense of heating, lighting, cleaning, and repairing college buildings—present and prospective.

5. The endowment of scholarships. At present, not less than \$15,000 is annually diverted from the college treasury for the sake of providing free, or nearly free, tuition to needy students. This sum would pay the salaries of six new professors occupying full chairs.

A detailed article on the Library in this issue sets forth what has been done during the past few months by way of re-arranging the books according to a more intelligible system.

The plan for a College Commons, which was briefly outlined in the last BULLETIN, has proved successful beyond what was hoped. If the present prosperity continues throughout the year, the Commons may doubtless be considered to have passed the tentative stage and become a permanent institution of the University. A detailed account of the Commons will be found on a later page of the BULLETIN.

At the June meeting of the Board of Trustees the appointment of an assistant for the departments of English Literature and the English Language was authorized. For the current year Mr. G. A. Mellen, B. A., of Brown University, '98, has been appointed. Mr. Mellen has been Assistant in Rhetoric at Brown University and has had experience in practical newspaper work.

During the absence of Professor Armstrong in Europe for the present collegiate year, the department of Philosophy is under the direction of Associate Professor Dodge.

NOTES OF THE LAST COMMENCEMENT.

TRUSTEE MEETING.—The annual meeting of the Board of Trustees was opened on the evening of Monday, June 26, 1899, and was concluded on the following day. Hon. George G. Reynolds, LL. D., was reelected President of the Board; John E. Andrus, Treasurer; and Rev. Edmund M. Mills, Ph. D., D. D., Secretary.

The President of the University presented his annual report, the financial report of the Treasurer was made and accepted, and Rev. O. B. Coit, D. D., presented the report of the Visiting Committee. A memorial minute upon the death of Rev. Albert S. Hunt, D. D., was adopted by a rising vote, and the minute was ordered to be printed in the BULLETIN. An appropriate minute upon the death of Mrs. Catharine R. Smith, widow of former President Smith, was also adopted.

The Library Committee, consisting of President Raymond, Professors Winchester, Kuhns, and W. J. James, was reappointed.

The following motion was adopted:—

"This Board desires to note that Dr. Daniel Wise was an honorary alumnus of this University, and received from it his A. M. in 1849, and his D. D. in 1859, and his contributions to the intellectual work and the literature of the church make his gift to the University seem in harmony with his life's work and the more appreciated by this institution

"It is also with gratitude that we recognize the willingness of his daughter to waive her legal rights so far as necessary to cause the full intent of her father in regard to this University to prevail.

"Whereas, the acceptance of the gift contained in the will of Dr. Daniel Wise calls for the execution by the University of a bond, and perhaps other papers,

"Resolved, That the President or the Treasurer be hereby authorized to execute such bond and other papers, and to that end each of such officers is hereby authorized to affix the seal of the University and sign his name thereto."

The President of the University was authorized to confer the following honorary degrees: The degree of Doctor of Divinity upon Rev. William Ingraham Haven, of New York, and Rev. David George Downey, of Brooklyn; the degree of Doctor of Laws upon Arthur Twining Hadley, President-Elect of Yale University.

The following Trustees were reëlected: Rev. Samuel F. Upham, D. D., LL. D.; Rev. Bishop Cyrus D. Foss, D. D., LL. D.; Charles Scott; Rev. Bishop Edward G. Andrews, D. D., LL. D.; Rev. Joseph E. King, D. D.; Rev. William V. Kelley, D. D.; Andrew C. Fields.

The following appointments were made to the Board of Instruction:—

Francis G. Benedict, Ph. D., Instructor in Chemistry.

George H. Ling, Ph. D., Instructor in Mathematics.

Harry E. Ford, B. A., Assistant in Modern Languages.

William M. Esten, M. S., Assistant in Biology.

Frederick W. Marvel, Ph. B., Director of Gymnasium.

Robert E. Harned, B. A., Assistant in Library.

Olin S. Blakeslee, Mechanician and Electrician.

The appointment of an assistant in the department of Astronomy and an assistant in the departments of English Language and English Literature was also authorized.

Professor Frank Walter Nicolson was appointed Secretary of the Faculty and Assistant Professor of Latin with permanent tenure and made a member of the Academic Council.

Professor Van Benschoten was granted leave of absence for the spring term of the current year, and Professor Kuhns for the academic year, 1900-1901.

The recommendations of the Faculty on the changes in the course of study were adopted.

A revised supplement to the Alumni Record was authorized.

Subscriptions to the deficit of the year just closed to the amount of \$6,967.69 were made.

The President of the Board was authorized to appoint a committee of five on the Twentieth Century Fund. Of this Committee three members, President Raymond, H. C. M. Ingraham, and George S. Coleman, have been appointed, with power to fill the two vacancies.

The Visiting Committee for 1899-1900 consists of Rev. E. W. Burr, D. D., Rev. J. H. Coleman, and Rev. F. M. North, D. D.

Minute in Memory of Albert S. Hunt.—"Shortly after our last annual meeting, one of our associates in this Board, Albert Sanford Hunt, suddenly and with scarcely any warning to his friends, entered upon the final rewards of a pure and greatly useful life.

His influence and his works, in other and more general and public relations, have received suitable commemoration elsewhere. It remains for us to record, in words simple and sincere, as befits his character, our tribute to his worth as a Trustee and lifelong friend of Wesleyan University.

From his boyhood, he was refined and scholarly in his tastes and aspirations. The writer of this remembers him well as he and his brother Andrew commenced at Amenia Seminary their preparation for a college course, having their minds and hearts set on this institution, then in the first decade of its existence. Albert Hunt, as a boy, evinced the same sedateness and dignity of character, joined with the same genial play of humor among his friends, which lightened up the seriousness of his life; the same enthusiasm for learning, which distinguished his life as a man in so marked and yet so unostentatious a way. He loved books, he loved study, he sought the society of the best people within his reach, and as he developed, his love for the institutions where he was trained, first for Amenia Seminary and then for Wesleyan University, became almost a passion. This was strikingly obvious to all who were familiar with him. Those of us who heard that matchless speech which he made here one year ago, on the receipt by the college of the portrait of one of its former Presidents, one of the finest inspirations of his life, will remember the tide of affection which he poured out in memory of the associates and associations of his student days, at the seminary and in the college, and of those later days when he was a tutor and an adjunct professor.

It was natural and fitting that such a man, with his gifts and graces, should become a member of the Faculty of his Alma Mater, as he was, till he felt a call to other fields of work and influence. There came a time later on, when the friends of the University would gladly have summoned him to the Presidency, but he forbade the offer. This was not however from any abatement of his love for the institution, or any diminution of his zeal in the cause for which it stands.

Holding the position of a Trustee for some years, and up to the time of his death, he was ever faithful to the University and alert and solicitous for its every interest. In this Board, as everywhere else, he was calm, modest, judicious and considerate, yet clear in his convictions and firm in his adherence to what he judged to be right and wise; and to his thinking, to be right *was* to be wise.

The most signal proof however of his attachment to his Alma Mater, and his confidence in its character and success, appears in his testamentary disposition of his worldly goods. His gift of \$30,000 to the Library endowment was a generous one, considering the amount of his estate; but a more touching proof of his filial love was his committing to the care of the college, for all time, the

almost sacred deposit of his own books, gathered through life with great care and superior judgment, some of them rare and costly; about six thousand bound volumes, besides a large collection of pamphlets; books that had been, not simply his tools, but his friends, the companions of his days and nights. He must have had for them a peculiar regard. He has sent them here in solemn trust, for keeping and for use, and as his best contribution to the broadest possible culture of the students who shall come here to gather an equipment for their life work. He asks only that his name shall be coupled with these treasures. Most willingly and faithfully will Wesleyan University fulfill his wishes. No more appropriate monument could be established to his memory; no better example could we hold up to those who come seeking wisdom, and the honor which comes from a true and consecrated life."

Minute in Memory of Mrs. Catharine R. Smith.—"The Trustees think it appropriate to make record in their minutes of the recent departure from this life of Mrs. Catharine R. Smith, the wife and for thirty-three years the widow of the fourth President of the University, the mother of two, and the grandmother of three, of its graduates.

From the beginning of the history of the institution Dr. Smith was the professor of Mathematics and Astronomy, and he was the intimate friend and valued co-laborer of Fisk and Olin. Mrs. Smith's charming personality made the home in which she always reigned, as the gracious queen, one of the most delightful resorts of the early Faculty and students. She had rare gifts to attract and inspire the young, as many of the veteran alumni will remember, and as all who knew her well, even near the close of her long pilgrimage of four score and ten years, will gladly testify. Indeed no part of her life furnished richer proof of her unique qualities in this regard than the last twenty years, when she had her home chiefly in Wells College, of which her daughter, Miss Helen F. Smith, is the Dean, and in which "Madame Smith," as she was termed with reverential affection, quietly exercised a very notable influence on the character of many young women, and has left a large cluster of very precious memories.

No widowed mother could wish a more delightful place in the loving care and devotion of children and children's children than Mrs. Smith so long enjoyed; nor could any weary pilgrim well expect a firmer step beyond the ninetieth milestone or a more peaceful sunset."

ALUMNI ASSOCIATION.—The annual meeting of the Association was held on Tuesday of Commencement Week. The following officers were elected for the year 1899-1900: *President*—George D. Beattys; *Vice-Presidents*—C. F. Rice, W. E. Smyser, E. P. Stevens; *Recording Secretary*—E. B. Van Vleck; *Treasurer*—S. V. Coffin; *Executive Committee*—Herbert Welch, D. W. Northrop, E. G. Derby, M. B. Crawford, W. U. Pearne.

Hon. D. W. Northrop was elected a member of the Alumni Library Committee.

Stephen H. Olin, LL. D., and Watson C. Squire, B. A., were re-elected Alumni Trustees.

Herbert Welch and S. V. Coffin were elected as the two alumni members of the Joint Committee on Co-education.

Mr. Welch read a communication from the Alumni Association in Chicago urging that the College establish a headquarters during the General Conference. It was then voted that the Association approve the plan of having a Wesleyan headquarters during the Conference, and that an appropriation of fifty dollars be paid over to the Committee at Chicago, and that the Executive Committee of the Trustees be requested to take the matter into consideration and make further appropriation, if necessary, from the funds of the College.

The Executive Committee was instructed to consider what modifications, if any, should be made in the method of electing Alumni Trustees.

The Executive Committee was also requested to prepare a schedule of topics to be discussed at specified hours at the next meeting.

The Joint Meeting of the Alumni and Trustees followed, and speeches were made by Judge Reynolds, Dr. Buckley, Dr. J. J. Tigert of the Church South, President Raymond, and Bishop Foss.

THE FINANCES.—The following is a brief statement of the property of the College, according to the most recent appraisal, and of the income and expenditure for the financial year 1898-99:—

Property of the University.

Invested funds and productive real estate, - - -	\$1,228.678	14
College buildings and campus, - - - -	531,300	00
Scientific collections and apparatus, - - - -	55,455	00
Library, - - - - -	45,000	00
Unproductive real estate, - - - - -	13,304	31
Furniture in various college buildings, - - -	12,480	00
Cash, - - - - -	30,265	03
Total, - - - - -	\$1,946,482	48

Receipts from May 31, 1898, to May 31, 1899.

Students' bills,* - - - - -	\$40,355	79
Interest on investments and rents, - - - -	59,640	61
Women's Dormitory, - - - - -	6,608	45
Alumni Library income, - - - - -	1,217	43
Special subscription for Library, - - - -	500	00
Special subscriptions for Chapel renovation, - -	1,125	00
Special subscriptions for deficit of 1898, - - -	1,750	00
Special subscriptions for other purposes, - - -	872	30
Miscellaneous, - - - - -	846	87
Balance advanced by Treasurer, May 31, 1899. -	6,961	37
Total, - - - - -	\$119,877	82

* Inclusive of \$16,640 tuition remitted.

Expenditures from May 31, 1898, to May 31, 1899.

Salaries, - - - - -	\$61,850 00
Fuel, light, water, insurance, - - - - -	4,615 58
Janitorial service, - - - - -	4,478 27
Repairs and improvements, - - - - -	4,954 40
Women's Dormitory, - - - - -	6,260 80
Department appropriations, - - - - -	3,584 53
Library, - - - - -	2,394 45
Aid to students—tuition, - - - - -	16,640 00
Interest, annuities, and scholarships, - - - - -	2,294 85
Chapel renovation, - - - - -	3,691 47
Printing, postage, catalogues, bulletins, etc., - - - - -	2,788 65
Miscellaneous, secretarial assistance, Commencement expenses, prizes, etc., - - - - -	4,405 17
Balance due Treasurer, May 31, 1898, - - - - -	1,919 65
Total, - - - - -	<u>\$119,877 82</u>

JOHN HUMPHREY SESSIONS.

Wesleyan University has lost a generous friend in the death of John Humphrey Sessions, of Bristol, Conn., who had been since 1878 a member of the Board of Trustees. Mr. Sessions was a worthy example of the type of men who have given our country its high position in the industrial world. He rose to wealth by his own industry, skill and sagacity. His foundry was a model, alike in the completeness of its equipment, and in the spirit of harmony that existed between employer and employee. He was a public-spirited citizen, giving generously of money, time and labor to every good cause. He was an earnest and devoted member of the Methodist Episcopal Church; and the beautiful church building in his own town was his gift, and is his monument. He left a legacy of \$25,000 to Wesleyan University. The college receives, however, only \$21,125, the remainder of the amount being consumed by the national and state inheritance taxes.

APPOINTMENT TO THE FACULTY.

EMORY B. LEASE, elected Instructor in Latin, in place of Herman W. Hayley, Ph. D., deceased, received the B. A. degree from the Ohio Wesleyan University in 1885 and the M. A. degree in 1888. After teaching six years, he spent three years as a graduate student at Johns Hopkins University, his principal subject being Latin; the two subsidiary subjects, Greek, and Sanskrit and Comparative Philology. At the end of his first year he was elected Fellow in Latin; at the close of the second, Fellow by Courtesy, and at the end of the third he received the Ph. D. degree. During the years 1894-96 he was Professor of Latin at Allegheny College, and during the summer of 1896 gave two courses

in Latin at the University of Chicago. During the year 1896-97 he took the work of Professor J. C. Rolfe at the University of Michigan, during his absence in Europe, with the rank of Assistant Professor of Latin. The following year was spent in study at the University of Munich and at Rome and Pompeii.

Dr. Lease's publications are as follows:—

A Syntactic, Stylistic, and Metrical Study of Prudentius, 1895, (89 pp.).

Zur Konstruktion von Licet, in the Archiv für Lateinische Lexicographie und Grammatik, Vol. XI., pp. 9-26 (an abstract of which appeared in the American Journal of Philology, XIX., p. 214).

Critical Notes to Kroll and Skutsch's Edition of *Firmicus Maternus*, Id. X., p. 565; *Nec Non et*, Id. IX., p. 390.

Corrections of Schmalz's Lateinische Syntax and Lateinische Stilistik, in the American Journal of Philology, Vol. XX., pp. 59-65; *I nunc* and *I* with another Imperative, Id. Vol. XIX., pp. 59-70.

He has also published six articles in the Classical Review, one of which was translated into Italian for "La Nostra Scuola," 1897, p. 214.

DEPARTMENT NOTES.

ENGLISH LITERATURE.—The modifications of the course of study authorized by the Trustees at their last meeting make it possible to begin the work of this department a year earlier than heretofore. Hereafter the course in the Outlines of the History of English Literature—English Literature I.—will be open to Sophomores; this year it is open to both Juniors and Sophomores. Next year and hereafter, beside the course in Literary Criticism and the rhetorical exercises assigned to this department, there will be three courses of instruction in English Literature, of two hours each, which may be designated as English Literature I., II. and III. Course II., corresponding in general with that now offered in the Senior year, will be open to those who have taken Course I.; Course III., a somewhat more advanced and critical course, will be open, with some restrictions, to those who have taken both the previous courses. As the subjects of Course II. will be changed in consecutive years, a student having elected Course II. in his Junior year may, if he wish, elect it again in his Senior year together with Course III. It will thus be possible for students showing special aptitude for literary study to take in all—including the course in Literary Criticism—five courses, equivalent to nine hours a week for one year.

It is probable that the subject of Course II., next year, will be the Literature of the Period 1832-1880; of Course III., the Period of Queen Anne.

ENGLISH LANGUAGE.—The changes made in the curriculum by the extension of the freedom of election in the Sophomore year have considerably modified the work in the department of the English Language. The following are the most important changes:—

1. Sophomore Rhetoric is transferred to the Freshman year. (Course I.)

2. The course in English readings heretofore given in the Freshman year has been dropped, and the Freshman introductory course in Old English made elective in the first half of the Sophomore year. (Course II.)

3. The Sophomore elective course in Old English, formerly given only in alternate years, is to be given yearly. The new course (comprising Courses II. and III.) is made up by a combination of the courses formerly known as Course I. A and Course IV.

4. The course in Middle English Literature, comprising selected readings in early English authors and a detailed study of Chaucer, is hereafter to be given annually. (Course VI.)

5. The course of lectures on the history of Middle English Literature is hereafter to be given annually. (Course VII.)

6. A new course in English Etymology and Old English dialects is given this year for the first time. This course is open to none but the most advanced students. (Course X.)

7. The details concerning the other advanced courses will be noted from time to time in succeeding BULLETINS.

HISTORY.—Several changes have been made in the department with a view to the better organization of the courses in History. The most significant of these changes is the opening of the introductory course in General History to Sophomores; and this course will hereafter be required as a preliminary to further work in the department. The course in English Constitutional History has been dropped, as the subject is practically covered in the courses on English History and on European Governments. Announcement has been made that the course in French History will only run as far as the Revolution, and the work will be confined to the first half-year. In place of the second half-year's work in French History, will be substituted a course in modern European History.

An important addition to the work of the department is the introduction of a course in Greek History by Professor Paton, which will afford opportunity of better preparation for those students who expect to teach this subject in our preparatory schools. It is hoped that this work will be supplemented by a similar course in Roman History.

The efficiency of the advanced work in American History has been increased by the establishment of a seminary room in 10 Observatory Hall, where all of the available books on the subject to be studied will be gathered and thus placed in a more accessible form for the use of the members of the Seminary.

ECONOMICS AND SOCIAL SCIENCE.—The changes which were last spring made in the college curriculum have permitted several modifications of the courses in Economics and Social Science. In the past the general introductory course in Economics has come in the latter half of the Junior year, and it has, therefore, been impracticable to open elective courses to others than Seniors. Under the present arrangement, however, the introductory course runs through

the year, and while it is intended primarily for Juniors, it may, with the consent of the officer in charge, be taken by Sophomores. Since with such a scheme it is possible for students who are especially interested in the studies of the department to make elections in both the Junior and the Senior year, it is no longer necessary that all of the electives be offered every year; and accordingly Course II. in the history and the advanced theory of Economics is made to come in alternate years with Course III. in public finance; Course V. in the general labor problem is made in like manner to alternate with Course IV. in money and banking; and Course VI. in Sociology with Course VII. in Social Science. At the same time the extent of the courses is much increased, so that now the total amount of the courses accessible to any student in the department is the equivalent of sixteen hours a week through one year.

RECENT GIFTS.

Miss Elizabeth J. Mead, of Stamford, has presented to the University \$38,000, subject, however, to an annuity during the life of the donor.

Subscriptions for the current expenses and the deficit of the financial year ending May 31, 1899, have been made to the amount of \$8,000.

W. H. Hall, '92, of South Wilmington, has given \$500 and A. W. Johnston, ex-'93, Staten Island, \$250 toward the equipment of the new Cryogenic Laboratory.

The Mansfield Post of the Grand Army of the Republic has given \$75.00 toward the chapel improvements.

James H. Bunce, of Middletown, has given \$50.00 towards the running expenses of the College Commons.

Attention should also be called to the bequest of the late John H. Sessions and to gifts to the Museum and Library which are mentioned elsewhere in the BULLETIN.

THE LIBRARY.

The necessity of re-arranging the Library has been recognized for years. The fixed shelf system, adopted thirty years ago, had proved itself impracticable, in part because of the natural growth of the library and in part because of the unexpected increase in certain classes of books. An attempt to bring together books on the same subject by changing their position, while retaining the same shelf numbers, was not satisfactory. Soon after the appointment of the present Librarian it was decided to adopt a new system of classification; and the expansive classification devised by Mr. C. A. Cutter, then of the Boston Athenæum, was chosen. Some preliminary work was done, including the arrangement of the books in philosophy and the marking of the books in theology and science, but it was evident that the work of actual re-arrangement

could be done to best advantage during the summer vacation, and that it would require a much larger force than that ordinarily employed.

The Board of Trustees, at their last meeting, authorized the employment of the necessary assistance. After due consideration it was decided to confine the re-arrangement to books in language, literature, science, and the arts, leaving other classes of books to be classified later. In addition to the Librarian eight persons were employed, some of them for only a short time. The Library was open ten hours a day during the entire summer. The work which was going on was not allowed to interfere with the free use of the books, even those in the classes specified above being put at the disposal of persons using the Library. The re-arrangement of the 18,000 volumes in language, literature, science, and the arts was completed by the time college opened, although certain details, which did not interfere with the use of the books, were not finished at that time. The amount and variety of labor involved in this re-arrangement can be appreciated only by those who have taken part in similar work.

The new classification permits the introduction of new books in their proper classes and of new classes in their proper order, and does not confine any class to a particular part of the Library building. The alcoves are numbered, and guide-cards indicate the location of the different classes in the alcoves. As entire classes of books were included in the re-arrangement, no difficulty has as yet been experienced in the employment of two systems of arrangement in the same building, nor is any difficulty anticipated during the time that must elapse before the disappearance of the old system.

It is believed that two more summer vacations will be sufficient to complete the re-arrangement of the entire Library.

Another important change made is the introduction of new catalogue cards. They are of the same length as the standard cards adopted by the American Library Association and of the same height as the cards now in use. All cataloguing is now done on the new cards, and it is intended that the books now in the Library shall gradually be re-catalogued. When that has been accomplished the cards will be cut down in height to the standard size. Some of the reasons for this change are the lack of uniformity in cataloguing and the variations in handwriting and in the quality and size of cards. An additional reason is the increase in the number of printed catalogue cards, the printed cards being of the standard size.

From May 1, 1899, to October 31, 1899, the sum of \$872.37 has been received on account of subscriptions to the Alumni Library Endowment.

At the beginning of the college year Mr. E. K. Hubbard, of Middletown, offered to the Library the collection of books which he had purchased from Mr. G. H. Hulbert, of Middletown. The offer was gladly accepted, and the books and cases are now stored in the Library building. The collection is general in character, and contains 853 bound volumes and 384 pamphlets. Some of the volumes have already been catalogued and shelved and others will be placed on the shelves during the year.

During the summer vacation 456 bound volumes and 128 pamphlets were received from the Superintendent of Documents at Washington. These books will fill numerous gaps in our collection of government publications.

The employment of a trained cataloguer, Miss Defendorf, a graduate of the Albany Library School, will render available a number of gifts which have been stored away until additional assistance could be secured to catalogue them. The cataloguing and shelving of such books has already made some progress.

THE MUSEUM.

Several gifts of money have been received since the last BULLETIN. Among these is a contribution of one hundred dollars from Mrs. Jane D. Boardman, of Middletown.

The last installment has now been paid of the money advanced by A. R. Crittenden, Esq., in 1896, for the purchase of the Barnes Collection of Indian relics from the vicinity of Chattanooga, Tenn., and for the expense of a collecting tour after fossils carried on by Mr. Loper in the same region. The Barnes Collection becomes accordingly the property of the college. It is an exceedingly valuable collection of objects which must, in the nature of the case, become increasingly rare.

During the early part of the summer, Mr. Loper was employed for some weeks under the auspices of the U. S. Geological Survey in Newfoundland and New Brunswick. After the completion of that engagement, he remained some weeks in New Brunswick and Nova Scotia, collecting minerals and fossils for the Museum. During most of that time Prof. Rice was associated with him in the work. The result of that expedition was the acquisition of more than four hundred fossils and more than five hundred minerals. Among the latter were many beautiful zeolites from the trap range which extends along the southeast shore of the Bay of Fundy, and many specimens of the rare borates occurring in the gypsum beds.

After his return from Nova Scotia, Mr. Loper made a trip to Middleville, Herkimer Co., N. Y., and made a collection of about a thousand of the beautiful quartz crystals for which that locality is remarkable. Still later, a little blasting was done at a locality in Chatham, Conn., by which more than two hundred specimens of yellow beryl were obtained.

THE COLLEGE COMMONS.

Friends of the college will be glad to learn that the plans announced in the June BULLETIN for the establishment of a Commons have been carried out, and that there is every indication that the institution will prove successful. About twenty-five men pledged themselves at the end of the last college year to join

such a club if organized. The present membership is thirty-eight, with a good prospect of increase.

Considerable changes were made during the summer in the Foss house, the lower floor being devoted to the purposes of the Commons and the upper rooms to dormitory use. The two east rooms of the lower floor have been furnished as dining rooms, and afford accommodations for forty boarders. A large room on the north side of the house serves as a sitting room and reading room, and is supplied with a piano and a small library.

The price of board has been tentatively fixed at two dollars and a quarter a week. It will not be known for some weeks whether this rate is high enough to meet expenses; but the guarantee is given the members that the price shall not exceed two dollars and a half per week. With good board at this low figure, and sleeping rooms costing with heat from twenty-five to forty dollars only per year for each student, it will be seen that the opportunities for economical living at Wesleyan are much greater than in preceding years.

The general management of the Commons remains in the hands of the college, the details being in charge of a matron who is responsible to a college officer. Bills are paid into the college treasury, and the college assumes all financial responsibility.

An organization has been effected among the members, and officers have been chosen. The intention is to make the club as attractive as possible in a social way, and an effort will be made to create interest in debating. A plan is now being discussed of establishing a mock parliament, to meet for debate once a fortnight or oftener.

It will be seen, therefore, that many of the advantages heretofore characteristic of the college fraternities only are now to be enjoyed by members of the Commons. Yet there is no possibility that the club will ultimately resolve itself into a secret fraternity. Its membership now comprises both fraternity and non-fraternity men. The hopes of the founders will be realized if it proves a pleasant meeting place for all college men, whether members of fraternities or not, who find economy necessary in order to secure a college education.

THE COMMITTEE ON CO-EDUCATION.

The joint committee to consider the question of co-education at Wesleyan, which was authorized by the Trustees at their meeting in March last, was completed by the appointment of the representatives of the alumni at Commencement. The committee as now constituted is as follows: For the trustees, John E. Andrus, Cyrus D. Foss, Joseph E. King, Stephen Henry Olin; for the faculty, President Bradford P. Raymond, J. M. Van Vleck, C. T. Winchester; for the alumni, Herbert Welch, '87, Seward V. Coffin, '89.

The committee held a meeting in New York, on Wednesday, July 5th, every member being present. Bishop Cyrus D. Foss was appointed chairman, and

Rev. Herbert Welch secretary. After some general discussion, a sub-committee was appointed to consider the question of the higher education of women, with special reference to the conditions at Wesleyan, and to report at a meeting of the full committee to be called not later than December 15th, 1899. The members of this sub-committee are President B. P. Raymond, J. M. Van Vleck, S. H. Olin, and Herbert Welch.

THE DEATH OF DR. HAYLEY.

By the sudden and tragic death, on the 24th of September last, of Herman W. Hayley, Ph. D., Instructor in Latin, Wesleyan University lost an able teacher and a scholar of most unusual promise. Dr. Hayley had, indeed, already made a brilliant record for the breadth, accuracy, and elegance of his classical studies; and it is not too much to say that, had life and health been given him for a score of years more, he would have had very few peers among the classical scholars of this country. He had a singular gift to teach. Accurate himself and insisting upon accuracy in his pupils, he was never dull in his class-room, but proved himself one of the most popular of teachers. Patient, sympathetic, with the faculty of remarkably lucid and attractive statement, thoroughly imbued with the literary spirit in its purest form, he succeeded in imparting to his pupils something of his own keen appreciation of the characteristic charm of classic literature.

During the two and one-half years of his life in Middletown, Dr. Hayley gained not only the esteem but the warm friendship of many in our college community. His quiet humor, his genuine unselfishness, his gentleness and patience under the peculiar burden of his life, won the sympathy of all who knew him, and ensure him a lasting place in their memory.

RECENT COLLEGE APPOINTMENTS.

CLASS.

- 1861. George Whitaker, President of Portland, Oregon, University.
- 1882. William Livesey Burdick, Associate Professor of Criminal Law, &c., University of Kansas.
- 1882. Karl Pomeroy Harrington, Professor of Latin, University of the State of Maine.
- 1884. Albert Raddin Sweetser, Professor of Biology, Pacific University, Oregon.
- 1887. Samuel Newton Taylor, Associate Professor of Physics, Syracuse University.
- 1889. Arthur W. Partch, Instructor in Philosophy and Economics, Nebraska Wesleyan University.
- 1890. Stockton Axson, Assistant Professor of English, Princeton University.

CLASS.

1890. Richard Watson Cooper, Professor of English Literature, Hainline University.
1891. Isabel Evangeline Graves, Head of Department of English Literature, Mt. Holyoke College.
1891. Linnaeus Edford La Fétra, Lecturer in Physiological Pedagogics, School of Pedagogy, New York University.
1891. Harry Monmouth Smith, Instructor in Chemistry, Syracuse University.
1892. Lincoln Robinson Gibbs, Professor of English, Mt. Union College, Ohio.
1892. Duncan Starr Johnson, Associate in Biology, Johns Hopkins University.
1894. Willis Thomas Lee, Fellow in Geology, Chicago University.
1895. Colbert Searles, Instructor in Romance Languages, Indiana State University.
1895. Edward Lee Thorndike, Instructor in Genetic Psychology, Teachers' College, Columbia University.
1896. Charles Samuel Leavenworth, Professor of History, Nanyang College, Shanghai, China.
1899. James Gardner Goodwin, Assistant Professor of Natural Sciences, Simpson College, Iowa.
1899. Robert Ellsworth Harned, Assistant Librarian, Wesleyan University.
1899. Fred Wooding Hutchinson, Assistant in Astronomy, Wesleyan University.
1899. Edwin Walter Kemmerer, Fellow in Political Economy, Cornell University.

CALENDAR.

- 1899.
- Sept. 28, Thursday, 9 A. M.,—College year began.
- Nov. 29, Wednesday, 12 M.,—Thanksgiving Recess will begin.
- Dec. 3, Sunday, 8:50 A. M.,—First chapel exercises after the close of the Thanksgiving Recess.
- Dec. 22, Friday, 12 M.,—Christmas Recess will begin.
- 1900.
- Jan. 3, Wednesday, 8 A. M.,—Christmas Recess will end.
- Jan. 25, Thursday,—Day of Prayer for Colleges.
- Feb. 5, Monday,—Feb. 17, Saturday,—Mid-year Examinations.
- Feb. 22, Thursday,—Washington's Birthday, a holiday.
- Apr. 11, Wednesday, 12 M.,—Spring Recess will begin.
- Apr. 17, Tuesday, 8 A. M.,—Spring Recess will end.
- May 3, Thursday,—Junior Exhibition.
- May 30, Wednesday,—Memorial Day,—A holiday.
- June 27, Wednesday,—COMMENCEMENT.



WESLEYAN UNIVERSITY BULLETIN.

MIDDLETOWN, CONN.

MAY, 1900.—No. 26.

THE SMALL SIZE and the late appearance of the present BULLETIN are due in large part to the fact that the report of the Committee appointed to consider the relation of Wesleyan University to the higher education of women is not to be published in the BULLETIN, as was at first contemplated, but in another form. The special report is addressed to the Trustees, but a limited number of copies are at the disposal of alumni, who may apply for them to the Secretary of the Faculty, Professor F. W. Nicolson.

The coming Commencement seems likely to be one of the most important in the history of the University. As all of the alumni are doubtless aware, the question of co-education, which has of late years been the leading topic of discussion, is to come before the Trustees in June for final action. No one can deny that the various aspects of the problem have been considered with due deliberation; but in order that the attitude of the alumni may be represented with perfect fairness as large a number as possible should plan to be present at the joint meeting of Trustees and alumni on the morning of Tuesday of Commencement week.

President Raymond is spending the month of May in Chicago as delegate to the General Conference of the Methodist Episcopal Church.

The university sermon at the coming Commencement will be preached by the Rev. Bishop Daniel A. Goodse, D. D., LL. D.

THE COMMITTEE ON CO-EDUCATION.

The Joint Committee of the Board of Trustees, the Faculty, and the Alumni Association, on the Relation of Wesleyan University to the Higher Education of Women presented a report to the Trustees, at the meeting of the Board in New York City, March 20th, 1900. That report, which received the unanimous vote of the seven members of the Committee present at their last meeting, was ordered, by the Trustees, to be printed, with some accompanying documents, in the present number of the BULLETIN, in order that the Alumni might know the conclusions of the Committee and have an opportunity, if they desired, of expressing their opinions on the matter. Since that time, however, it appears that some members of the Committee, on further reflection, are no longer prepared to assent to the report, believing it to involve a wider departure from the present system than they can consistently favor. The report, therefore, no longer represents a unanimous committee. A further consideration by the Committee is consequently desired. In view of the probability that this report is not final, but will be replaced before the Board of Trustees by a report or reports to be later agreed upon, it is thought best not to print it in this BULLETIN.

LECTURES AND PUBLICATIONS BY MEMBERS OF THE FACULTY.

PROFESSOR RICE.—*Lectures*.—Scientific Thought in the Nineteenth Century. Centennial Celebration of the Connecticut Academy of Arts and Sciences, New Haven, Conn., Oct. 11, 1899. (Published in *Science*, Dec. 29, 1899.)

Findings of Science and Christian Faith. Methodist Episcopal Church Congress, St. Louis, Mo., Nov. 29, 1899. (Published in *St. Louis Globe-Democrat*, Dec. 10, 1899, and in *Zion's Herald*, Dec. 20, 1899.)

The Physical Geography of Connecticut. Connecticut Agricultural College, Storrs, Conn., Jan. 17, 1900.

Anthropomorphism. Hamilton Theological Seminary (Colgate University), Hamilton, N. Y., Feb. 15, 1900.

The Return to Faith. Hamilton Theological Seminary (Colgate University), Hamilton, N. Y., Feb. 16, 1900.

PROFESSOR ATWATER.—*Lectures*.—Some Things about the Teaching of Physiology in the Public Schools. Annual meeting of State Association of Grammar School Teachers, Hartford, October, 1899.

Food Economy and Alcohol Physiology in the Public Schools. The New England Association of School Superintendents, Boston, November, 1899.

The Law of the Conservation of Energy in the Living Organism. American Chemical Society, New Haven, December, 1899; and Joint Meeting of Chemical and Medical Societies, Washington, D. C., January, 1900.

The Nutritive Value of Alcohol. American Physiological Society, New Haven, December, 1899.

Alcohol Physiology and Superintendence. Annual Conference of the Department of Superintendence of the National Educational Association, Chicago, February, 1900.

Respiration Calorimeter Experiments, Chicago Chemical Club, Chicago, February, 1900; and Chemical Society of the University of Illinois, Champaign, Ill., February, 1900.

Publications.—Preliminary Report on Dietaries for Hospitals for the Insane. Tenth Annual Report of New York State Commission in Lunacy, 1899.

Description of a New Respiration Calorimeter (with E. B. Rosa). *Bulletin No. 63, Office of Experiment Stations, U. S. Department of Agriculture, 1899.*

Experiments on Metabolism of Matter and Energy in the Human Body (with F. G. Benedict and with coöperation of A. W. Smith and A. P. Bryant). *Bulletin No. 69, Office of Experiment Stations, U. S. Department of Agriculture, 1899.*

A New Respiration Calorimeter and Experiments on the Conservation of Energy in the Human Body (with E. B. Rosa). *Physical Review*, Vol. IX., Nos. 3 and 4, September and October, 1899.

Dietary Studies of University Boat Crews (with A. P. Bryant). *Bulletin No. 75, Office of Experiment Stations, U. S. Department of Agriculture, 1900.*

PROFESSOR WINCHESTER.—*Lectures.*—Six lectures before the Brooklyn Institute, on the Literature of the Period of Queen Anne.

Six lectures on the Donovan Foundation in The Johns Hopkins University. The Essayists and Reviewers of the Early Nineteenth Century: 1, Introductory; 2, Hazlitt; 3, Lamb; 4, DeQuincey; 5, Wilson; 6, Leigh Hunt.

One lecture in Princeton University, "A Study of Matthew Arnold."

One lecture in Amherst College, "The Work of John Ruskin."

Other single lectures in Springfield, Mass., Philadelphia, Charleston, S. C., and other places.

Publications.—The Elements of Literary Criticism. pp. xii. + 352. The Macmillan Company, New York, 1899.

John Ruskin. *The Methodist Review*, March-April, 1900.

PROFESSOR CONN.—*Lectures.*—The Uses of Bacteria. The Nature School at Kingston, R. I., July, 1899.

Bacteria in Milk. The Wood's Holl Biological School, July, 1899.

Marine Biological Laboratories, and Variation in Bacteria. The Cold Spring Biological School, July, 1899.

New Methods of Studying Evolution. New Britain Scientific Association, Dec. 18, 1899.

New Studies in Protoplasm. Itinerants' Club, Tarrytown, Oct. 18, 1899; Brooklyn Institute, Dec. 11, 1899; Portland, Me., Jan. 15, 1900.

Bacteria in Milk. Medical Society of the County of New York, Jan. 29, 1900.

A Biologist's View of the Problem of Sin. District Meeting of the N. Y. E. Conference, New Britain, Feb. 27, 1900.

The Healthfulness of Milk. Dairy Institute, Springfield, Mass., April 5, 1900.

The Physiological Effect of Alcohol. Methodist Social Union, Boston, Mass., April 16, 1900.

Publications.—Alcohol as a Food. *Christian Advocate*, July, 1899.

The New Battle of the Pigmy and the Giant. *Methodist Review*, July–August, 1899.

The Milk Supply of Cities. *Popular Science Monthly*, August, 1899.

A series of articles in the *Popular Science*, as follows: The Origin of the Eye, July, 1899. Why are Vertebrates the Highest Animals? Dec., 1899. How Backbones are Built, Feb., 1900. How We got our Brains, Mar., 1900.

The Story of the Living Machine. D. Appleton & Co., New York, 1899.

The Ripening of Cream. *Bulletin No. 21, Storrs Agricultural Experiment Station*, 1900.

PROFESSOR MEAD.—*Lecture.*—The Poetry of the Old Norse Vikings. Mt. Holyoke College, Feb. 13, 1900.

Publications.—Is Spelling a Lost Art? *Educational Review*, Jan., 1900.

Review of Kistenmacher's *Die Wörtlichen Wiederholungen im Bêowulf*. *Journal of Germanic Philology*, Vol. II., No. 4.

Review of Skeat's edition of *The Lamentation of Mary Magdaleyne*. *Journal of Germanic Philology*, Vol. III., No. 1.

MR. JAMES.—Early American Imprints. Paper read before the New York Library Club, May 10, 1900. (Published in *The Publishers' Weekly*, May 19, 1900.)

PROFESSOR PATON.—The Myth of Alcestis in Ancient Literature and Art. Paper read before the Archaeological Institute of America, New Haven, Dec. 27, 1899.

Publications.—Articles on The Archaeological Institute of America, Archaeology, and Bacchylides. *The International Year Book*, 1898. Dodd, Mead & Co., New York, 1899.

Contributions to Archaeological News and Discussions in *The American Journal of Archaeology, Second Series*, Vols. II. and III.

PROFESSOR BRADLEY.—*Lecture*.—Liquid Air. Y. M. C. A., Naugatuck, Oct. 20, 1899; Wallingford, Dec. 19, 1899; New Britain Scientific Association, Jan. 8, 1900; Waterbury Scientific Association, Jan. 9, 1900; Smith College Club, Hartford, Jan. 12, 1900; Williams College, Jan. 25, 1900; Blackstone Library Course, Branford, Feb. 2, 1900; Winter Chautauqua, Centenary Church, Binghamton, N. Y., Feb. 13, 1900; Repeated, Mar. 2, 1900; University Extension Course, New Haven, Mar. 8, 1900; Oneonta, N. Y., Apr. 13, 1900.

The U. S. Life Saving Service. Lee, Mass., Apr. 5, 1900.

Publications.—Cold, in the Liquefaction of Air. *Popular Science*, October, 1899.

Liquefaction of Air,—Pressure. *Popular Science*, October, 1899.

A Serviceable Generator for Hydrogen Sulphide. *American Chemical Journal*, January 14, 1900.

PROFESSOR E. B. VAN VLECK.—On Linear Criteria for determining the Circle of Convergence of a Power Series. Paper read before the American Mathematical Society, New York, February 24, 1900.

Publication.—On the Determination of a series of Sturm's Functions by the Calculation of a Single Determinant. *Annals of Mathematics*, Second Series, Vol. I., No. 1.

PROFESSOR KUHN.—*Publications*.—Dante's Influence on English Poetry in the Nineteenth Century. *Modern Language Notes*, June, 1899.

French Readings for Beginners. H. Holt & Co., New York, 1899.

PROFESSOR ROSA.—*Publications*.—A New Respiration Calorimeter and Experiments on the Conservation of Energy in the Human Body (with W. O. Atwater). *Bulletin 63 of the U. S. Department of Agriculture*, and *The Physical Review*, September and October, 1899.

On the Metabolism of Matter in the Living Body. *The Physical Review*, March, 1900.

PROFESSOR FAUST.—*Publication*.—Heine's Prose, with Introduction and Notes. The Macmillan Co., New York, 1899.

DR. BENEDICT.—*Lecture*.—The Respiration Calorimeter and Experiments on the Metabolism of Matter and Energy in the Human Body. New England Association of Chemistry Teachers, Boston, Mass., April 14, 1900.

Publications.—Experiments on the Metabolism of Matter and Energy in the Human Body (with W. O. Atwater). *Bulletin 69, U. S. Department of Agriculture, Office of Experiment Stations*, 1899.

Absorption Apparatus for Elementary Organic Analysis. *American Chemical Journal*, XXIII., 323-334.

The Elementary Analysis of Organic Substances Containing Nitrogen. *American Chemical Journal*, XXIII., 334-352.

Aluminium. *Aluminum World*, Vol. VI., Nos. 2 and 3.

PROFESSOR DODGE.—The Reaction Time of the Eye. *Psychological Review*, Sept., 1899.

Zur Erläuterung unserer tachistoskopischen Versuche. von Benno Erdmann und R. Dodge. *Zeitschrift für Psychologie und Physiologie der Sinnesorgane*. Bd. XXII.

Review of Die Präcision der Blickbewegung und der Localisation an der Netzhautperipherie. Chas. B. Morrey. *Psychological Review*, November, 1899.

FACULTY LECTURE COURSE.

As for several years past, a course of public lectures has been given this year by members of the Faculty. The speakers and their subjects were as follows:—

December 14, 1899.—Professor W. N. Rice. The Reform of the School Curriculum.

January 18, 1900.—Professor A. B. Faust. Otto Von Bismarck.

January 27.—Professor C. T. Winchester. The Work of John Ruskin.

February 20.—Professor W. E. Mead. The Robin Hood Ballads.

March 8.—Professor E. B. Rosa. Automobiles (Illustrated).

March 20.—Professor W. P. Bradley. Submarine Navigation (Illustrated).

April 3.—Professor J. M. Paton. "The Birds" of Aristophanes (Illustrated).

MIDDLETOWN SCIENTIFIC ASSOCIATION.

The following subjects have been discussed at the meetings of the Association since the last report in the BULLETIN:—

June 13, 1899.—The Nutritive Value of Alcohol. Professor W. O. Atwater.
Notes on the recent Earthquake. Professor W. N. Rice.

October 19.—Recent Progress in the Production and Use of Liquid Air. Professor W. P. Bradley.

Note on the Wehnelt Interrupter with some Experimental Illustrations of its Use. Professor M. B. Crawford.

November 14.—New Methods of Studying Evolution. Professor H. W. Conn.

December 12.—A Novel Method for the Aeration of Beverages. Dr. F. G. Benedict.

Scientific Thought in the Nineteenth Century. Professor W. N. Rice.

January 9, 1900.—Storage Batteries and their Uses. Professor E. B. Rosa.

February 6.—Wireless Telegraphy. Professor M. B. Crawford.

March 13.—Field-work in Geology and Palaeontology. Mr. S. Ward Loper.

April 10.—The Nutritive Value of Alcohol and the Temperance Question. Professor W. O. Atwater.

Some Aspects of Old English Science. Professor W. E. Mead.

May 8.—Dr. Lewis G. Westgate's Researches on the Crystalline Rocks east of Middletown. Professor W. N. Rice.

A Note on the Characteristic Quality of the Vowel A. Professor M. B. Crawford.

The Steam Turbine Engine as Applied to Steamships and to the Driving of Dynamo Machinery. Professor E. B. Rosa.

THE APOSTLES' CLUB.

The Club has held its regular monthly meetings through the college year. The list of subjects and speakers is as follows:—

October.—Professor Dodge. The Psycho-Physical Basis of Language.

November.—Professor Kuhns. The Settlement of Germantown.

December.—Professor Fisher. The Scope of the Social Sciences.

January.—Professor Farrand. American Histories and Historians.

February.—Professor Paton. Pictures on Greek Vases.

March.—Professor Nicolson. Prose Fiction among the Romans.

April.—Mr. Ford. The French-Canadians and their Language.

May.—Professor Winchester. The Early Reviewers.

SUNDAY AFTERNOON ADDRESSES.

Three addresses have been given in the Chapel on Sunday afternoons as follows:—

February 18, 1900.—The Christlike God. Rev. W. F. MacDowell, D. D., Corresponding Secretary of the Church Board of Education.

March 11.—The New Philanthropy, or the Settlement and its Mission. Professor H. G. Mitchell, Wesleyan, '73, of Boston University School of Theology.

April 1.—The Return to Faith. Professor W. N. Rice.

JUNIOR EXHIBITION.

The annual Junior Exhibition was held in Memorial Chapel on the evening of Thursday, May 3. The judges were Rev. Samuel Hart, D. D., of the Berkeley Divinity School, Middletown, Hon. Francis Hubert Parker, LL. B., of Hartford, and Martin Green Benedict, Ph. D., Principal of the New Britain High School. These gentlemen awarded the first prize to Emmett Wells Gould, of Goulds, N. Y., whose theme was "Modern Misers"; and the second prize to Burton Howard Camp, of Hartford, who discussed the question "How Should We Judge General Lee?"

MUSEUM NOTES.

The most important accession to the Museum since the last BULLETIN is Mr. Loper's collection of minerals and fossils, which has been purchased for one thousand dollars. The collection includes about two thousand fossils and about twelve hundred minerals, and its accumulation has cost many years of work. Among the fossils are more than a hundred fine specimens of the Triassic fossil fishes and plants, chiefly from Middlefield and Durham. A number of these specimens are peculiarly valuable, as being the types of species described by Newberry in his Monograph of Triassic Plants and Fishes, published by the United States Geological Survey. The special aim of the administration of the Museum is to represent as completely as possible the geology and other departments of the natural history of our own locality. The Loper collection is in this view an accession of extraordinary value. The Museum has been fortunate indeed in obtaining the collection at so reasonable a price. Four hundred dollars of the purchase money has been contributed by W. N. Rice, A. R. Crittenden, W. W. Wilcox, and the Middletown Scientific Association. It is hoped that generous friends of the Museum will speedily be found who will give the remaining six hundred dollars.

Mr. Loper has contributed to the Botanical Department of the Museum a collection of more than a hundred specimens of woods.

A remarkably fine fossil ray, from the Eocene beds at Fossil, Wyoming, has been purchased from Mr. R. L. Craig. This specimen supplements well the splendid collection of fossil fishes from that locality made by Mr. Loper in the summer of 1898.

A valuable collection of about thirty Campanian vases and other ceramic articles, discovered some years ago in excavations near the Hotel Vittoria at Sorrento, has been deposited in the Museum by Mrs. William E. Gilbert. Mr. Gilbert chanced to be living in the Hotel Vittoria at the time of the discovery of the relics, and purchased them on the spot.

The Mineralogical Collection has been rearranged in accordance with the classification given in the latest edition of Dana's System of Mineralogy. Cards have been printed and placed on the shelves, giving a statement of the classification, and other cards giving the chemical formula of each species represented in the collection.

LIBRARY.

From Nov. 1, 1899, to April 30, 1900, the sum of \$814 has been received on account of subscriptions to the Alumni Library Endowment. The total amount received since May 1, 1899, is \$1,686.37.

The treasurer of the university has received \$20,000 from the executor of the estate of the late Albert S. Hunt, D. D. The balance of the legacy, \$4,000, has been retained by the executor to pay the national and state inheritance taxes.

There have been presented to the library from May 1, 1899, to April 30, 1900, 2,227 bound volumes, 2,973 pamphlets and numbers of periodicals, and 402 maps. The principal donors were the United States Government, the state libraries of Connecticut, Massachusetts, and New York, and the following individuals:—A. C. Bruner, '79, E. P. Clarke, '85, Prof. H. W. Conn, Prof. M. Farrand, Prof. A. B. Faust, G. S. Godard, '92, T. R. Hoyt, '84, Hon. E. K. Hubbard, Miss L. Jackson, Prof. W. E. Mead, '81, Prof. J. M. Paton, Hon. O. H. Platt, Rev. S. E. Quimby, '59, B. A. Rich, '78, Hon. A. S. Roe, '70, E. O. Smith, '93, Hon. N. D. Sperry, Prof. J. M. Van Vleck, '50, C. S. Wadsworth, Prof. C. T. Winchester, '69.

The books in ethics have been reclassified since the publication of the last BULLETIN, and a shelf-list on cards of the books reclassified last summer is nearly completed.

During the coming summer the new classification will be extended to another portion of the library.

Friends of the university who own any of the following publications are urged to present them to the library:—*The Methodist*, Journal of the General Conference, 1892, 1896; *Daily Christian Advocate*, 1848, 1852, 1856, 1868.

THE NEW CRYOGENIC LABORATORY.

Until within comparatively recent years the thermal boundaries within which scientific investigation was practically possible were marked on the one hand by the temperature attainable by the use of the oxy-hydrogen blow-pipe, perhaps

2000° Centigrade, and, on the other, by that of a freezing mixture of solid carbon dioxid and ether, or about 79° below zero Centigrade.

The development of the dynamo has made possible the modern electric furnace, whose enormously high temperature has not only greatly extended the upward range of scientific inquiry, but has already led to the production of many new substances of prime industrial importance such as calcium carbide, from which acetylene is made, and carborundum, the new abrasive. Similarly, the possibility of producing liquid air cheaply is just now extending immensely our command over nature in the opposite direction, the direction of cold.

The opportunities for scientific inquiry which this new field affords are very great, and are being diligently improved by some half dozen universities across the Atlantic. In order that Wesleyan may share in these pioneer investigations, the Trustees of the University took action March 30, 1899, authorizing the establishment here of a "cryogenic" laboratory for the prosecution of investigations at low temperatures. Wesleyan was the first educational institution in this country to take such action. The equipment of this laboratory is to be essentially that of a liquid air plant, and will consist of a four stage compressor from the factory of the Norwalk Iron Works, a 6 H-P Mietz and Weiss kerosene motor, and a liquefier, for which the designs were prepared by Mr. Oscar P. Ostergren of New York. The compressor, which will be constructed from special designs, has an intake of eight cubic feet of air a minute and yields pressures of 2,500 lbs. and upward. It is the gift to Wesleyan of Ebenezer Hill, Esq., '70, Manager of the Norwalk Iron Works. The substantial loyalty shown by Mr. Hill the University has had previous occasion also to acknowledge. The motor is the gift of Hon. Wm. H. Hall, '92, Chairman of the Senate Committee on Labor in the legislative session of 1899. The expense of the liquefier, which is being constructed under the supervision of Mr. O. S. Blakeslee, of the mechanical laboratory, is assumed by Mr. A. W. Johnston of the S. S. White Dental Co., and sometime member of the class of '93. Pledges are now being received to cover the purchase of auxiliary apparatus for use in the investigations, and these will be acknowledged in the next number of the BULLETIN.

The plant thus contributed will be installed in the west half of the building formerly used as a gymnasium, which has been admirably arranged for the new work.

This "cryogenic" laboratory has been placed by vote of the Trustees in charge of Prof. Bradley of the chemical department, and will be devoted mainly to chemical research. The physical and biological departments however will also avail themselves of the opportunities which the laboratory will afford.

It is hoped that the laboratory may be fully equipped and ready for work early in the next college year.

OBITUARY RECORD.

The following deaths among the alumni have been reported since the publication of the last obituary record:

CLASS.

1834. John Wesley Merrill, b. 9 May, 1808, in Chester, N. H.; d. 9 February, 1900, in Concord, N. H.
1840. Joseph Denison, b. 1 October, 1815, in Bernardston, Mass.; d. 19 February, 1900, in Manhattan, Kan.
1842. Joseph M. Greenwood, b. 18 January, 1824, in Haverstraw, N. Y.; d. 14 May, 1899, in Brooklyn, N. Y.
1849. Lorenzo Dow, b. 10 July, 1825, in Sumner, Me.; d. 12 October, 1899, in New York, N. Y.
1851. John Henry Gaylord, b. 23 November, 1824, in New Milford, Conn.; d. 2 June, 1899, in Springfield, Mass.
1851. Othniel Holmes, b. 14 June, 1823, in Marcellus, N. Y.; d. 18 November, 1899, in Cedar Rapids, Iowa.
1853. Francis Day Hodgson, b. 7 June, 1832, in Philadelphia, Penn.; d. 12 December, 1899, in Newark, N. Y.
1855. Henry Vosburgh, b. 23 July, 1827, in Kinderhook, N. Y.; d. 29 March, 1900, in Oramel, N. Y.
1857. Newell Fitch Nichols, b. 5 March, 1831, in Vienna, N. Y.; d. 14 January, 1900, in Aurora, Ill.
1858. Joseph Whitcomb Ellis, b. 18 September, 1829, in Springfield, Vt.; d. 4 September, 1898, in Albany, N. Y.
1859. Walter Stevens Cushman, b. 16 December, 1837, in Philadelphia, Penn.; d. 20 July, 1898, in Asheville, N. C.
1860. Edson Wyllys Burr, b. 29 March, 1841, in Middletown, Conn.; d. 19 May, 1900, in Island Heights, N. J.
1863. Timothy Eleazer Steele, b. 1 September, 1837, in Bolton, Conn.; d. 30 June, 1899, in Hartford, Conn.
1869. Albert Gillett Jepson, b. 21 June, 1842, in Hammond, N. Y.; d. 23 February, 1900, in East Saint Louis, Ill.
1874. Albert Prescott Doe, b. 16 September, 1848, in Vassalborough, Me.; d. 27 July, 1899, in Exeter, N. H.
1876. Stephen Olin Garrison, b. 25 December, 1853, in Millville, N. J.; d. 17 April, 1900, in Vineland, N. J.
1879. Howard Perry, b. 3 April, 1857, in Camden, N. J.; d. 28 February, 1900, in Washington, D. C.
1885. William Scott Foster, b. 23 February, 1860, in S. Windsor, Conn.; d. 6 August, 1899, in Foxville, Mass.
1887. Edmund Richard Foley, b. 8 August, 1859, in Wolcott, Conn.; d. 17 July, 1899, in Southington, Conn.
1891. Lloyd Hawley Andrews, b. April, 1866, in Bethel, Conn.; d. 4 August, 1899, in Bethel, Conn.

CALENDAR.

1900.

- May 31, Thursday, 7:30 P. M.,—Junior Prize Debate.
- June 22, Friday, 7:30 P. M.,—Freshman, Sophomore, and Junior Prize Declamation.
- June 24, Sunday, 10:30 A. M.,—Baccalaureate Sermon, by the Rev. Bradford Paul Raymond, D. D., LL. D.
- June 24, Sunday, 7:30 P. M.,—University Sermon, by the Rev. Bishop Daniel A. Goodsell, D. D., LL. D.
- June 25, Monday, 11:00 A. M.,—Public Awarding of Prizes.
- June 25, Monday, 2:00 P. M.,—Class Day Exercises.
- June 25, Monday, 8:00 P. M.,—Annual Meeting of Board of Trustees.
- June 25, Monday, 8:00 P. M.,—Glee Club Concert.
- June 26, Tuesday, 9:00 A. M.,—Meeting of the Φ . B. K. Fraternity.
- June 26, Tuesday, 10:00 A. M.,—Business Meeting of the Alumni Association.
- June 26, Tuesday, —Reunions of Classes of 1850, '60, '65, '75, '80, '85, '90, '93, '97.
- June 26, Tuesday, afternoon,—Receptions by the College Fraternities.
- June 27, Wednesday, 10:00 A. M.,—COMMENCEMENT.
- June 27, Wednesday, afternoon,—Commencement Dinner.
- June 27, Wednesday, evening,—President's Reception.
- June 28, Thursday, 9:00 A. M.,—Examination of candidates for admission begins.
- Sept. 26, Wednesday, 9:00 A. M.,—Examination of candidates for admission begins.
- Sept. 27, Thursday, 9:00 A. M.,—First Term begins.

—THE—

WESLEYAN UNIVERSITY BULLETIN.

MIDDLETOWN, CONN.

NOVEMBER, 1900.—No. 27.

OUR NUMBERS THIS YEAR show an advance over those of any previous year. The Freshman class of last year had 101 members; the Freshman class of this year has 108 members. The total number of students in college this year is 349, a gain of ten. As the number of students in 1890-91 was 250, there has been a gain of 99 in ten years.

By the action of the Trustees at the last Commencement, the much debated question of co-education at Wesleyan has been removed from the list of questions pressing for immediate solution. No action could entirely satisfy the radical advocates of policies diametrically opposed, but the compromise finally adopted is believed by those who have studied the problem in all its bearings to be in accord with the views of the great majority of the alumni of the University. The official statement of the plan finally adopted will be found in the report of the meeting of the Board of Trustees.

The BULLETIN of a year ago drew attention to five pressing needs of the University, and urged that the friends of Wesleyan unite to meet these needs in the near future. Up to the present, however, no large gifts have made it possible to drop any of the items from the list, and it is therefore re-presented in this BULLETIN:—

I. A new building to contain class-rooms and administrative offices. No new building for these purposes has been added in nearly thirty years. A suitable building will cost from \$100,000 to \$150,000.

2. The completion of the Alumni Library Fund of \$50,000, and the endowment of special departments of the Library. All the books bought with the income of a special endowment fund would be marked with the name of the donor.

3. A new Physical Laboratory.

4. The addition of at least one million dollars to the general endowment fund. This is needed in order (1) to make possible the promotion of several members of the Faculty to permanent positions and the founding of new chairs in important departments; (2) to provide for the deficit due to falling rates of interest; (3) to meet the expense of heating, lighting, cleaning and repairing college buildings—present and prospective.

5. The endowment of scholarships. At present, not less than \$15,000 is annually diverted from the college treasury for the sake of providing free, or nearly free, tuition to needy students. This sum would pay the salaries of six new professors occupying full chairs.

A detailed article on the Library in this issue sets forth what has been done during the past few months by way of rearranging the books according to a more intelligible system. Under the new system a glance at the shelves shows how much, and—unfortunately, in many cases—how little the Library has to offer on various subjects. Some departments, owing to their age or to special gifts, make a respectable showing. Other departments, especially those which have been founded within a few years, are still very imperfectly supplied with the books needed for advanced work. Friends of the University who are seeking to know in what way they can make their gifts most useful can find no more efficient way of aiding the every-day work of the institution than by the endowment of any one of the sixteen or more departments of the University with a fund sufficient to enable it to provide the books necessary for advanced students.

It is especially gratifying to be able to add that the alumni, particularly the younger alumni, are now giving attention to this matter with a view to completing the Alumni Library Fund of \$50,000 before the next Commencement.

The suggestion has been not infrequently made that an endowed lecture course would prove of great value to our students, by affording opportunity to hear representative public men discuss the subjects on which they are recognized authorities. There is little question that such a course of lectures would receive the hearty support of the entire University. The expenditure of a few hundred dollars yearly would thus make it possible for a student in the four years of his college course to hear a score or more of the most notable public speakers in the country. A fund of from \$10,000 to \$15,000, which might well bear the name of the donor, would be ample for the purpose; and the course might prove as attractive as any other feature of our University life.

The advantages afforded by the College Commons to students desiring good board at a low figure have attracted so large a number of students to the Commons as to prove somewhat embarrassing. Satisfactory accommodations can be found for little more than half of those who have applied. To meet this demand for more room, a new dining-hall is now in process of construction. The details are presented on a following page.

Owing to unavoidable delay in procuring some necessary data, the publication of the annual Catalogue will be deferred until shortly before the mid-year examinations in February.

During the absence in Europe of Professor Kuhns for the present collegiate year, the work in the department of Romance Languages is in charge of Frederick Curry Ostrander, B. A., Wesleyan, '93.

NOTES OF THE LAST COMMENCEMENT.

TRUSTEE MEETING.—The annual meeting of the Board of Trustees was opened on the evening of Monday, June 25, 1900, and was concluded on the following day. Hon. George G. Reynolds was re-elected President of the Board; Rev. Edmund M. Mills, D. D., Secretary, and John E. Andrus, Treasurer.

The President of the University presented his annual report. The financial report of the Treasurer was also made and accepted.

The attention of the Trustees throughout both sessions was given mainly to the question of co-education in the University. A majority report and two minority reports were received from the Joint Committee of Trustees, Faculty, and Alumni on the Higher Education of Women at Wesleyan. These three reports were discussed at length, but the Trustees declined to adopt any one of the three without modification, though their final action was in most points in substantial agreement with the recommendations of one of the minority reports. That action was embodied in the following resolution:—

“Wesleyan University was founded as a college for men. Since 1872 both sexes have been admitted on equal terms to the advantages of the University. While maintaining standards of admission, educational methods, curriculum and community life primarily adapted to men, since such facilities may be of peculiar benefit to a limited number of women, the University will admit women in a number limited to those who can be accommodated in the college buildings and in their own homes in Middletown, and the number in the University shall be limited to twenty per cent. of the whole number of students in the preceding year.

“The names of the women and other information concerning their interests, shall be printed in a separate section of the University Catalogue.

“Honors in scholarship awarded to women, wherever announced, shall be stated separately from those awarded to men.

“Women shall receive their degrees at Commencement separately from men.

“All class declamations and other rhetorical exercises of women shall be separately conducted, and all public competitions or exercises of a rhetorical character shall be held apart from those of the men.

“The presentation of excuses, the announcement of electives, the payment of bills, and other details of administration, as far as found practicable, shall be conducted at a separate office for women.

“All matters on which the interests of the University or of women suggest some differentiation, are hereby referred to the Academic Council.”

It was voted that in the expenditure of the income from the Hunt Library Fund, \$500 a year be reserved from that income and applied to the principal until the fund shall have been made up to the whole amount of the original bequest, which was \$30,000.

The following Trustees were elected to succeed themselves: Joseph S. Stout, David Ward Northrop, Cephas B. Rogers, John E. Andrus, Letsome T. Wooster, their terms to expire in 1905. Charles Gibson and William E. Sessions were elected Trustees, the term of the former to expire in 1901 and of the latter in 1903.

The following appointments were made on the Board of Instruction—

Emory B. Lease, Ph. D., to be Instructor in Latin for one year.

Francis G. Benedict, Ph. D., to be Instructor in Chemistry for one year.

George H. Lang, Ph. D., to be Instructor in Mathematics for one year.

Harry E. Ford, B. A., to be Tutor in Modern Languages for one year.

William M. Esten, M. S., to be Assistant in Biology for one year.

Frederick W. Marvel, Ph. B., to be Director of the Gymnasium for one year.

Harry T. Baker, B. A., to be Assistant in English for one year.

Frederick W. Grover, B. S., to be Assistant in Physics and Astronomy for one year.

Walter F. Dearborn, B. A., to be Assistant Librarian for one year.

Samuel W. Loper, M. A., to be Curator of the Museum, with permanent tenure of office.

Olin S. Blakeslee, to be Mechanician and Electrician, with permanent tenure of office.

During the summer Harry E. Ford resigned, and the Executive Committee appointed Frederick C. Ostrander, B. A., to be Tutor in Modern Languages for one year.

The President was authorized, at his discretion, to give free tuition to the amount of \$14,000.

The following minute was adopted concerning the late Edson W. Burr—

"Edson W. Burr, D. D., born in March, 1841, died in May, 1900. In 1860, thirty-nine young men were graduated from the Wesleyan University. The youngest of the number was Edson W. Burr. In college he was a diligent and consecrated student. His quiet and unassuming manner, his faithfulness to every duty, his cheerful ways and smiling face made him universally beloved by his classmates. The characteristics of his college days marked his career through life and won for him everywhere the love and esteem of all who knew or labored with him. His life reflected the high regard of his fellow men. He was deserving of the honors he received from the church and his Alma Mater. For a number of years he was a member of this body, and the memory of such association with him recalls the painstaking care with which, as Secretary, he recorded the doings of the Trustees. Everything in his life was solid and substantial. His work was well done. By grace of thought and speech, by kindly deeds of charity and love, by diligence in his Master's business, whether temporal or spiritual, as a faithful steward in every duty, his memory deserves a place in our deepest affection, and we record in the minutes of our deliberations the memorial of our love and his life's work.

"To-day is the fortieth anniversary of his graduation. We write on the minutes of this meeting, that we honor the memory of Edson W. Burr, that we appreciate his life's work, that we revere the character that he builded, and that we have an abiding faith that the Master whom he served 'doeth all things well.'"

The following minute was adopted concerning the late John H. Sessions:—

"By the death of John Humphrey Sessions, Wesleyan University has lost a sincere and generous friend, who since 1878 has been a useful member of this Board. Mr. Sessions was a worthy example of the type of men in the industrial world, who out of adverse circumstances in the beginning, by their own industry and skill, achieve success. As a large employer of labor he illustrated the best Christian principles. In the use of the wealth that came to him he was public spirited, wise and generous, and he showed his interest in the cause of higher education by frequent gifts to our college and by a handsome legacy in his will. We are glad to place upon our records our appreciation of his high character and usefulness and our deep sense of loss."

ALUMNI ASSOCIATION.—The annual meeting of the Association was held on Tuesday of Commencement Week. The following officers were elected for the year 1900-'01: *President*—Joseph Pullman; *Vice-Presidents*—A. S. Roe, I. J. Lansing, D. W. Northrop; *Recording Secretary*—E. B. Van Vleck; *Corresponding Secretary*—W. J. James; *Treasurer*—J. E. Loveland; *Executive Committee*—Herbert Welch, E. B. Birdsey, E. G. Derby, M. B. Crawford, W. U. Pearne.

Hon. G. G. Reynolds was reelected Alumni Trustee, and Rev. Herbert Welch was elected Alumni Trustee in place of Hon. A. L. Smith, who had declined to serve longer.

Prof. J. M. Van Vleck was re-appointed member of the Alumni Library Committee.

The following resolutions regarding the mode of electing Trustees, were presented on behalf of the Executive Committee by H. Welch, and adopted by the Association:—

"*Resolved*—That we respectfully request the Board of Trustees to modify the regulations for election of Trustees by Alumni (adopted by the Board, March 23, 1894), in the following particulars:—

1. That the Librarian be directed, immediately upon the close of the ballot for the nomination of candidates, to notify the persons chosen as nominees; and that in case any of the nominees decline to stand as candidates, that fact be stated upon the second circular sent to the Alumni, and the names next in order in the nominating ballot be added to complete the number of six nominees.

2. That to allow sufficient time for such communications, the ballot for nomination of candidates close on the first day of May, and that the preliminary notice be sent not later than the first day of March.

3. That the Librarian be directed in sending out the second circular with the names of candidates to give the name, class, residence, and vocation of the candidates and information concerning degrees received, offices held, publications made, pursuits followed, and other items such as would properly be included in the Alumni Record.

"*Resolved*—That it is the sense of this meeting that the Trustees elected during Commencement Week, should take office at the close of the Commencement season during which they are elected, and we respectfully request the Board of Trustees to seek such amendment of the charter of the University as shall provide for this change.

"In view of the unusual size of the Board of Trustees, and in view of the small proportionate number of the Trustees elected by the Alumni,

"*Resolved*—That we respectfully request the Board of Trustees to take into consideration the desirability of any change in the size and constitution of the Board, and especially of an increase in the proportionate number of the Trustees elected by the Alumni, and we respectfully suggest that such action as is herein suggested would meet with the approbation of the Alumni meeting."

The Alumni members of the Joint Committee of Trustees, Faculty and Alumni on the Higher Education of Women in Wesleyan University, stated to the meeting the recommendations of that one of the minority reports of the Joint Committee which they had signed, and this statement introduced a long and earnest discussion of the whole question. At the close of the discussion, a vote was passed, approving the report which their representatives had signed, and recommending it to the Trustees for adoption.

Owing to pressure of business, the Trustees were unable to meet in joint session with the Alumni Association.

THE FINANCES.—The following is a brief statement of the property of the University, according to the most recent appraisal, and of the income and expenditure for the financial year 1899-1900:—

Property of the University.

Invested funds and productive real estate, - - -	\$1,304,628 14
College buildings and campus, - - - - -	531,300 00
Scientific collections and apparatus, - - - - -	85,455 00
Library, - - - - -	55,000 00
Unproductive real estate, - - - - -	13,304 31

Furniture in various college buildings,	-	-	-	\$12,480	00
Cash,	-	-	-	52,906	90
Total,	-	-	-	\$2,055,074	35

Receipts from May 31, 1899 to May 31, 1900.

Students' bills,*	-	-	-	\$36,815	51
Interest on investments and rents,	-	-	-	58,382	43
Women's Dormitory,	-	-	-	6,147	85
Commons,	-	-	-	2,091	60
Special subscriptions for Cryogenic Laboratory,	-	-	-	750	00
Special subscriptions for Museum,	-	-	-	1,031	89
Special subscriptions for deficit of 1899,	-	-	-	6,967	69
Special subscriptions for other purposes,	-	-	-	205	00
Miscellaneous,	-	-	-	1,066	66
Balance advanced by Treasurer, May 31, 1900,	-	-	-	11,885	28
Total,	-	-	-	\$125,343	91

Expenditures from May 31, 1899 to May 31, 1900.

Salaries,	-	-	-	\$63,730	00
Fuel, light, water, insurance,	-	-	-	6,503	20
Janitorial service,	-	-	-	4,106	75
Repairs and improvements,	-	-	-	4,592	59
Women's Dormitory,	-	-	-	5,471	60
Commons,	-	-	-	1,914	59
Department appropriations,	-	-	-	2,193	01
Library,	-	-	-	1,975	46
Museum,	-	-	-	1,197	21
Cryogenic Laboratory,	-	-	-	656	94
Mechanical Laboratory,	-	-	-	1,538	64
Gymnasium,	-	-	-	172	95
Aid to students—tuition,	-	-	-	13,918	00
Interest, annuities, and scholarships,	-	-	-	2,645	07
Printing, postage, catalogues, bulletins, etc.,	-	-	-	2,910	11
Miscellaneous, secretarial assistance, Commencement expenses, prizes, etc.,	-	-	-	4,874	70
Balance due Treasurer, May 31, 1899,	-	-	-	6,953	09
Total,	-	-	-	\$125,343	91

* Inclusive of \$13,918 tuition remitted.

APPOINTMENT TO THE FACULTY.

FREDERICK C. OSTRANDER, appointed Tutor in Modern Languages in place of Harry E. Ford, resigned, received the degree of B. A. from Wesleyan University in 1893. During the year 1893-94 he acted as Assistant Secretary of the Faculty at Wesleyan University, doing also some graduate study in French and German. After a year of teaching, he spent two years at the universities of Leipzig, Berlin and Geneva in the study of Romance and Germanic Philology. Since the fall of 1897 he has been teaching French and German, most of the time at the Brooklyn Latin School.

DEPARTMENT NOTES.

GREEK.—A new course (X.) in Greek Antiquities is offered this year by Professor Paton. The home life of the ancient Greeks is discussed during the first half-year, and the organization of society and the state, during the second. This course is intended to alternate with the course in Greek History, given for the first time last year.

ENGLISH LITERATURE.—A new course is offered in this department this year, open to any students who have taken the introductory course on the history of English Literature. This course is assigned to the Junior year, and is designated as English Literature II. The subject of the course for the present year is the literature of the period 1832-1880, with especial attention to the work of Carlyle, Tennyson and Browning.

ENGLISH LANGUAGE.—A graduate course in Icelandic is given this year for the first time. In this course especial emphasis is laid upon the relation of Icelandic to the Old English language and literature.

PHILOSOPHY.—Courses V., IX., X., XI. and XII., which were omitted during Professor Armstrong's absence, are given again this year.

The special topics for this year's course in Advanced Psychology, Course IX., are taken from the field of Abnormal and Social Psychology. Great assistance for the work in Abnormal Psychology has been given by the Superintendent and Pathologist of the Connecticut State Hospital for the Insane.

RECENT GIFTS.

C. H. Buck, '64, has given \$1,000 to the University for the Twentieth Century Fund.

The late G. W. Quereau, '49, has given \$2,000 to the University for the Alumni Library Fund.

Subscriptions for the deficit of the financial year ending May 31, 1900, have been made to the amount of \$650.

LIBRARY.

The reclassification of the books in the library, begun during the summer of 1899, was continued during the past summer. About 7,000 volumes in theology were classified, marked and shelved. Guide-cards for the different classes have been placed on the shelves.

The work of preparing a shelf-list on cards for the books included in the new classification (upwards of 25,000 volumes) has been completed. This shelf-list will be kept up to date, and will be extended to include the unclassified books as they are classified.

The number of volumes added to the Library from June 1, 1899, to May 31, 1900, was 3,027. They were obtained as follows: By purchase, 519; by binding periodicals, 199; by exchange, 686; by gift, 1,623. Deducting 127 volumes, exchanged or withdrawn, there remains a net addition of 2,900 volumes. The total number of volumes in the library at the present time is 59,000.

From June 1, 1899, to May 31, 1900, 7,045 books and periodicals were drawn from the library for home use. In addition, 1,307 volumes were withdrawn from circulation and reserved either in the library or in seminary rooms.

From May 1, 1900, to October 31, 1900, the sum of \$2,011 has been received on account of subscriptions to the Alumni Library Endowment. Of this amount the late Rev. George W. Quereau, D. D., 1849, of Aurora, Ill., gave \$2,000. The Alumni Library Endowment amounts now to \$28,956.70.

The Hunt Library Endowment Fund amounts to \$26,483. At their last meeting the Board of Trustees voted to reserve annually \$500 of the income of this fund until the principal should be made up to \$30,000.

THE MUSEUM.

During the summer vacation, Professor Rice attended the meeting of the International Congress of Geologists in Paris, and joined in geological excursions organized in connection with the Congress, in Ardennes, the Paris basin, and Auvergne. He collected for the Museum a series of the volcanic rocks of Auvergne, and some fossils.

A block of sandstone containing a cast of the trunk of a tree has been presented to the Museum by the Brownstone Quarry Company of Cromwell. This interesting specimen was carried in the procession at the celebration of the 250th anniversary of the settlement of Middletown.

THE COLLEGE COMMONS.

Announcement was made in the BULLETIN one year ago of the establishment of a College Commons. It is a pleasure to report that the institution has proved decidedly successful. Beginning with a membership of twenty-five, the number reached over forty before the end of the last college year. This year the increase has been even more marked, the total membership at present being over seventy. The rooms on the lower floor of the Foss House not being large enough to accommodate this number, the Executive Committee of the Trustees have voted to proceed at once with the erection of a new dining-hall in the rear of the main building, connected with it by a corridor. The lower floor only will be finished this year; next summer four or five living rooms will be added on the second floor, thus increasing the number of low-priced rooms at the disposal of the College for the use of students of limited means. The two connected rooms in the Foss House which are now being used as a dining-room will hereafter serve an excellent purpose in furnishing a meeting place for the literary and debating society which has been successfully carried on by the members of the Commons during the past year.

In order to meet the interest on the expenditure involved in these improvements, the price of board at the Commons will be increased from \$2.25 to \$2.35 a week. The experience of a year has shown that satisfactory board can be provided, with careful management, at this figure. It may be questioned whether there is another college in New England which provides its students with board at such a low cost.

Other results have been secured, however, by the establishment of the Commons, perhaps even more important than providing food at a low price. The Commons rooms now form a home for the rapidly increasing number of non-fraternity men in college. Here they have their social and literary meetings once a week, thus securing some at least of the advantages of fraternity life. Moreover, a number of fraternity men have availed themselves of the opportunity of reducing expenses by boarding at the Commons. Fifteen members of fraternities now take their meals there, including representatives from all the chapters at Wesleyan, with one exception. Several graduate students also, including two assistants on the College faculty, are boarding at the Commons. This mingling of fraternity and non-fraternity men, of graduates, upper-classmen and freshmen, cannot but tend to foster the spirit of democracy which is one of the best features of Wesleyan life.

ACADEMIC COSTUME.

Upon the initiative of a few of the larger American universities, an inter-collegiate commission was appointed about three years ago to secure, if possible, by the harmonious action of the colleges and universities of the country, some intelligible uniformity in the system of academic costume worn upon appropriate occasions by officers and graduates of the respective institutions. The recommendations of that commission have been very generally adopted throughout the country, and in order to put Wesleyan University into accord with other collegiate institutions, and to relieve the embarrassment under which her officers and graduates have sometimes labored in the lack of any distinctly authorized costume upon formal occasions elsewhere when the wearing of academic costume is the rule, the Academic Council, acting under the authorization of the Board of Trustees, passed the following vote on June 19, 1900. *It will be observed, however, that under this vote no change is made or intended in the customs that have heretofore prevailed on academic occasions at Wesleyan University regarding the actual wearing of academic costume.*

"The academic costume hereinafter described is adopted and authorized to be worn upon all appropriate occasions by persons holding office under or degrees from Wesleyan University.

"The full costume shall consist of cap, gown and hood, all of which shall be of the shape and pattern of those worn by graduates of the University of Oxford, England, and of the materials and colors hereinafter specified.

"The gown shall be black in color; of worsted stuff for the Bachelor's degree, and of worsted stuff or of silk for the Master's and Doctor's degrees. The gowns of the Bachelor's and Master's degrees shall be untrimmed. The gown of the Doctor's degree shall be faced down the front with black velvet, with bars of the same across the sleeves; or the facings and crossbars may be of the same color as the binding or edging of the hood.

"The hood shall be black in color, and of worsted stuff or of silk, with a lining in all cases of silk. The color of the lining shall be cardinal, with a bend, or diagonal stripe, of black in each half of the hood, so as to give the effect of a chevron. The outer edge of the hood shall be edged or faced on the outside with a cord, or with a band not more than four inches in width, of silk, satin, or velvet; white in color, if the degree be in Arts or Letters; scarlet, if in Theology; purple, if in Law; green, if in Medicine; dark blue, if in Philosophy; gold-yellow, if in Science; brown, if in Fine Arts; and pink, if in Music. The hood of the Bachelor's degree shall be not over three-fourths of the length of the hoods of the Master's and Doctor's degrees.

"The cap shall be black in color, of woolen stuff, or of silk, and shall be ornamented with a long black tassel attached to the middle point of the top. The cap of the Doctor's degree may be of velvet, and the tassel in whole or in part of gold thread.

"Members of the Board of Trustees shall be entitled, during their term of office, to wear the gown and cap of the Doctor's degree, with the hood appropriate to the degree that they severally have received. Members of the Board of Trustees, or of the Faculty, who have received degrees from other universities or colleges, shall be entitled to wear the costume appropriate to the same degree from Wesleyan University, so long as they shall retain their official connection with this University. The President of the University may adopt such distinctive costume or badge as he shall choose, not inconsistent with the foregoing regulations."

AWARD OF MEDALS.

The Franklin Institute of Philadelphia has awarded the Elliott Cresson Gold Medal to Professor W. O. Atwater and Professor E. B. Rosa for their Respiration Calorimeter. The award was made on the recommendation of a committee of specialists appointed by the Institute to investigate the calorimeter.

An exhibit of the respiration and bomb calorimeters in use at Wesleyan, was made at the Paris Exposition as a part of the Experiment Station exhibit, under the auspices of the United States Government. A gold medal for the exhibit was awarded to Professor Atwater as collaborator.

ANNIVERSARY CELEBRATION.

The first agricultural experiment station in the United States was opened in Judd Hall in the autumn of 1875. This enterprise, at first merely tentative, proved so successful that after two years the Connecticut legislature provided for a permanent station at the State Agricultural College, then connected with the Sheffield Scientific School of Yale University. The example of Connecticut was followed by other states, and in 1887 an act of Congress made the enterprise national by establishing such stations in all the states and territories.

The Association of American Agricultural Colleges and Experiment Stations held its annual convention this year at New Haven and Middletown, when the twenty-fifth anniversary of the opening of the first station was celebrated on Wednesday, November 14.

President Stubbs of the University of Nevada, President of the Association, was in the chair at the morning session, which was held in the Memorial Chapel. President Raymond welcomed the Association to Wesleyan University. Professor W. H. Jordan of the New York Experiment Station delivered an address on the history of the movement in general, the results already attained, and the work that yet remained to be done. Professor Atwater followed with a history of the movement in Connecticut from its first inception, in which he showed how prominent a part has been played by the graduates of Wesleyan and of the Storrs Experiment Station. The abstract scientific work of the Station is carried on in the chemical and biological laboratories of Wesleyan University, and the graduates of Wesleyan have been active both at the headquarters in Washington and in the State experiment stations.

After the morning exercises a lunch was served in the Fayerweather Gymnasium to the delegates and invited guests. In the afternoon the exercises were of a more strictly scientific character, dealing with the work of the stations and especially with the respiration calorimeter at Wesleyan.

There were over one hundred delegates present, representing thirty-nine states and territories.

CLASS.

RECENT COLLEGE APPOINTMENTS.

- 1885. Irving Samuel Haynes, Professor of Practical Anatomy, Cornell University Medical College.
- 1888. Aaron Louis Treadwell, Professor of Biology, Vassar College.
- 1889. William Emory Smyser, Benjamin F. Cessna Professor of English, Ohio Wesleyan University.
- 1890. Lewis Gardner Westgate, Professor of Geology, Ohio Wesleyan University.
- 1891. Harry Monmouth Smith, Associate Professor of Chemistry, Syracuse University.
- 1892. Harvey Carson Grumbine, Instructor in English, Pennsylvania State College.
- 1893. George Hubbard Blakeslee, Townsend Scholar, Harvard University.
- 1893. Frederick Curry Ostrander, Tutor in Modern Languages, Wesleyan University.

1895. Norman Everett Gilbert, University Scholar in Physics, Johns Hopkins University.
1897. Ferris Greenslet, Instructor in English, University of Texas. [Resigned].
1897. Irville Charles Le Compte, Instructor in English Language and Literature, Ursinus College.
1898. Alling Prudden Beardsley, Laboratory Assistant in Chemistry, Sheffield Scientific School, Yale University.
1898. Philip Bovier Hawk, University Scholar, Yale University.
1900. Robert Cecil McMahon, University Scholar, Columbia University.
1900. Harry Torsey Baker, Assistant in English, Wesleyan University.
1900. Walter Fenno Dearborn, Assistant Librarian, Wesleyan University.



CALENDAR.

1900.

- Sept. 27, Thursday, 9 A. M.,—College year began.
Nov. 23, Wednesday, 12 M.,—Thanksgiving Recess will begin.
Dec. 2, Sunday, 8:50 A. M.,—First chapel exercises after the close of the Thanksgiving Recess.
Dec. 21, Friday, 5 P. M.,—Christmas Recess will begin.

1901.

- Jan. 3, Thursday, 8 A. M.,—Christmas Recess will end.
Jan. 24, Thursday,—Day of Prayer for Colleges.
Feb. 4, Monday,—Feb. 16, Saturday,—Mid-year Examinations.
Feb. 22, Friday,—Washington's Birthday, a holiday.
April 3, Wednesday, 12 M.,—Spring Recess will begin.
April 9, Tuesday, 8 A. M.,—Spring Recess will end.
April 25, Thursday,—Junior Exhibition.
May 30, Thursday,—Memorial Day,—A holiday.
June 26, Wednesday,—COMMENCEMENT.

—THE—
WESLEYAN UNIVERSITY BULLETIN.
MIDDLETOWN, CONN.

MAY, 1901.—No. 28.

THE approaching Commencement season promises to be of unusual interest.

President McKinley had agreed to be present for one or more days, but, owing to the regretted illness of his wife, he may be compelled to abandon his visit. There will, however, be a number of visitors of national reputation who will take part in the public exercises of the week.

At the distribution of prizes on Monday morning of Commencement week Justice David J. Brewer, of the United States Supreme Court, is expected to be present and to make an address. Justice Brewer was for three years a member of the class of '55 at Wesleyan.

The oration before the Phi Beta Kappa Society on Tuesday afternoon is to be delivered by Postmaster-General Charles E. Smith. Secretary Hay and Secretary Long may also be present and deliver short addresses.

The University Sermon this year will be preached by the Rev. William F. McDowell, D. D., Corresponding Secretary of the Board of Education of the Methodist Episcopal Church.

Special attention is directed to the new regulations concerning the issue of tickets to the Commencement Luncheon. The great increase in recent years of the number of Commencement guests has made necessary some changes in the conditions on which tickets can be furnished. The details are given on another page.

The favorable showing made by the Library even under present conditions is well set forth in the report that appears on a following page. The greatest obstacle now encountered is the difficulty of purchasing with the modest sum appropriated to each department the expensive sets of special periodicals and similar works that must be secured, if at all, as complete works. The purchase of a single set of such books would, in many cases, exhaust for a year or two the entire appropriation of a department.

We venture once more, therefore, to emphasize the fact that the Library, which is fundamental to the work of every department of the University, should be so amply endowed as to make increasingly possible the work demanded by the conditions of modern scholarship.

The money for the much-desired new recitation hall and administrative building has not yet been fully secured. Considerable progress has, nevertheless, been made with the subscription list, and it is to be hoped that a combined effort on the part of the alumni and friends of the University will make the project an assured success before Commencement week. At all events, the work of the University cannot much longer be satisfactorily done in the present quarters.

An important change in the method of selecting the contestants for the Junior Debate has been made this year. By the new method the choice of speakers is determined by a series of preliminary debates.

We regret to be obliged to record the departure of several members of the faculty to other fields of labor. Professor Farrand has accepted a call to be head of the Department of History at Leland Stanford, Jr., University. Dr. Ling has been appointed Instructor in Mathematics in Columbia University. Dr. Lease, Instructor in Latin, resigned his position in February to accept an Instructorship in the Department of Latin in the College of the City of New York. Mr. Marvel, the Director of the Gymnasium, has resigned in order to devote himself to business life. Mr. Blakeslee, the College Mechanician, after ten years of service at Wesleyan, has accepted a business offer from a mining company in Colorado.

To fill the vacancy caused by the resignation of Dr. Lease in February, George D. Chase, B. A. (Harvard, '89), Ph. D. (Harvard, '97), has been appointed Instructor in Latin.

APPOINTMENT TO THE FACULTY.

GEORGE DAVIS CHASE, elected Instructor in Latin in place of Emory B. Lease, resigned, received from Harvard University the degrees of B. A. in 1889, M. A. in 1895, and Ph. D. in 1897. His special subject of study was Comparative Philology, and his work included Latin, Greek, Sanskrit, and Germanic Philology. The year 1897-98 was spent in the study of the Slavic languages and of Philology at Leipzig, as Kirkland Fellow of Harvard.

Dr. Chase was sub-master of Bristol Academy, Taunton, Mass., from 1889 to 1894. In 1898 he was chosen to teach Latin at the Lawrenceville School, Lawrenceville, N. J. In 1899 he was elected Assistant Professor of Comparative Philology at Cornell University, which position he resigned to accept the appointment at Wesleyan in February, 1901. At Cornell he taught Greek, Sanskrit, Comparative Grammar, General Linguistics and Gothic.

Dr. Chase's publications are as follows: The Origin of Roman Prænomina, Harvard Studies in Classical Philology, Vol. VIII.; The form of Nominal Compounds in Latin, Harvard Studies, Vol. XI.; Sun Myths in Lithuanian Folk Songs, Transactions of the Amer. Phil. Assoc., Vol. XXXI.

Dr. Chase has in preparation a school edition of selections from Cornelius Nepos, which is to appear in the Twentieth Century series published by Appleton & Co.

DEPARTMENT NOTES.

GENERAL LINGUISTICS.—Dr. Chase will offer for next year a course of weekly lectures on the general principles of the science of language, open to Juniors and Seniors. The course is intended not merely for students of Latin and Greek, but for all students who are interested in the problems concerned with the growth development and relationship of languages in general. The discussion will cover such topics as the laws of relationship in language; the causes of change in language; the principles governing sound-change, with an outline of the general principles of phonetics; the influence of analogy in producing changes in language; the direct influence of languages upon one another; families and groups of languages; methods of the comparative study of languages; the Indo-European group of languages; the home and character of the original Indo-European language; the history of the study of Comparative Philology, its importance, and its historical and ethnological results.

LATIN.—The course in IV. Latin, which for some years past has been upon the writers of elegiac poetry, will next year consist of readings from the satires and epistles of Horace.

The special course offered by Professor Merrill in addition to the courses regularly scheduled will for next year consist of Selected Chapters of Roman Archæology, and will be open to such Juniors and Seniors as secure *before Commencement* the approval of the instructor. The topics discussed will include an outline of the general characteristics and of certain important schools of classical art; Roman numismatics; the interpretation of (chiefly historical) Latin inscriptions; and such other subjects as may appear fitted to the especial needs of the students who are admitted to the course. The course will count for either two or three hours a week for the year, according to the arrangement of work made for each student on consultation with the instructor. Professor Paton has consented to coöperate with Professor Merrill in the instruction in this course.

HISTORY.—The course in Greek History (Course II.) will be given next year for three hours a week in the second half-year instead of for two hours a week through the year.

CHEMISTRY.—Next year Professor Bradley will give a course of lectures, in part experimental, on the Liquefaction of Gases. This course will be elective, with permission of the instructor, for those who have taken I. Chemistry, and will begin after the mid-year examinations. An elective course by Dr. Benedict in experimental chemistry, to illustrate the fundamental principles of the inorganic and analytical branches of the science, is also contemplated for next year.

BIOLOGY.—Several changes will be made in the courses in this department next year, the purpose of which is to enable students taking the subject in the Freshman and Sophomore years to pursue a more consecutive course. The changes in elective courses are as follows:

Biology V. Practical Biology. This course hitherto open only to Juniors and Seniors will hereafter be open to Sophomores. Sophomores who desire to take the course must obtain the permission of Professor Conn.

Biology IV. Zoölogy. This course, hitherto open to classical Juniors, will hereafter be open to Sophomores.

FACULTY LECTURES AND PUBLICATIONS.

PROFESSOR RICE.—*Lectures.*—Education in Middletown. Celebration of the 250th Anniversary of the Settlement of Middletown, Oct. 13, 1900.

The Educational Work of Methodism. Mid-year Assembly of New York East Conference, Norwalk, Conn., Nov. 14, 1900.

The Present Status of Evolution. Connecticut Valley Theological Club, Springfield, Mass., Dec. 4, 1900.

Paleontology and Evolution. Springfield Zoölogical Club, Springfield, Mass., Dec. 5, 1900.

The Return to Faith. Methodist Episcopal Church, Mamaroneck, N. Y., Jan. 21, 1901.

The Volcanic Region of Central France. Bridgeport Scientific Society, Bridgeport, Conn., Feb. 26, 1901.

The One Saving Name. Boston Interseminary Missionary Alliance, School of Theology of Boston University, April 18, 1901.

PROFESSOR ATWATER.—*Lectures*.—False and True Teaching in our Schools concerning Alcohol. American Social Science Association, Washington, D. C., May 9, 1900.

Experiments on the Nutritive Value of Alcohol. Boston Physical Education Society, Boston, Mass., May 10, 1900.

The Connecticut Experiment Station. Association of American Agricultural Colleges and Experiment Stations, Middletown, Conn., Nov. 14, 1900.

What is Available Energy? Association of American Agricultural Colleges and Experiment Stations, Middletown, Conn., Nov. 14, 1900.

What and How Much Temperance Physiology should the Statutes Require to be Taught? Connecticut Council of Education, New Haven, Conn., Feb. 9, 1901.

The Conservation of Energy in the Living System. Sheffield Scientific School Lecture Course, New Haven, Conn., March 15, 1901.

The Conservation of Energy in the Living Organism. Northeastern Section American Chemical Society, Boston, Mass., March 21, 1901.

Publications.—Nutritive Value of Alcohol. *Harper's Magazine*, October, 1900.

Alcohol Physiology and Temperance Reform. *Harper's Magazine*, November, 1900.

Second Report on Dietaries for Hospitals for the Insane. *Eleventh Annual Report of N. Y. State Commission in Lunacy*, 1900.

Third Report (preliminary) on Dietaries for Hospitals for the Insane in the State of New York. *Twelfth Annual Report of N. Y. State Commission in Lunacy*, 1901.

Discussion of the Terms Digestibility, Availability, and Fuel Value. *Annual Report Storrs Agricultural Experiment Station*, 1899.

The Availability and Fuel Value of Food Materials (with A. P. Bryant). *Annual Report Storrs Agricultural Experiment Station*, 1899.

Composition of Common Food Materials.—Available Nutrients and Fuel Value (with A. P. Bryant). *Annual Report Storrs Agricultural Experiment Station*, 1899.

PROFESSOR WINCHESTER.—*Lectures*.—Six lectures on the Essayists and Reviewers of the early Nineteenth Century. The Brooklyn Institute, Sept. 28–Nov. 9, 1900.

The same lectures, in the Yale University Lecture Course, Dec. 3–17, 1900, and in Hartford, Nov. 3–Dec. 12, 1900.

The Disappearance of Literature, an address before the Nineteenth Century Club of New York, Nov. 20, 1900.

Remarks on the Literature of New England, an address at the Annual Dinner of the New England Society of Brooklyn, Dec. 21, 1900. (Printed in *The Methodist Review* for May–June, 1901.)

Lectures before the State Teachers' Association of Wisconsin, St. Paul, Dec. 26, 1900; before the High School Association of Cleveland, Ohio, Feb. 4, 5, 1901; before the Twentieth Century Club of Pittsburgh, Pa., Feb. 6, 1901; in Providence, R. I., Montclair, N. J., Charleston, S. C., and various schools.

PROFESSOR CONN.—*Lectures*.—Bacteria; and A Biologist's View of the Doctrine of Sin. Two lectures before the Itinerants' Club of Yonkers, N. Y., Oct. 2, 1900.

The Public Milk Supply. Brooklyn Institute, Oct. 8, 1900.

Bacteria; and The Struggle of the Pygmies and the Giant. Two lectures, Woonsocket, R. I., Jan. 18, 1901.

The Relation of Mosquitoes to Malaria. Bridgeport, Feb. 5, 1901.

The Struggle of the Pygmies and the Giant. Mamaroneck, N. Y., Feb. 22, 1901.

What is a Microbe? Fitchburg, Mass., Feb. 25, 1901.

The College Graduate in Industrial Life. Convocation Address at the Boston University Commencement Exercises, June 5, 1901.

Publications.—Four articles upon Zoölogical topics in *Popular Science* (June, August, October, and December, 1900).

Cheap Milk is Poor Milk. *American Kitchen Magazine*, July, 1900.

Classification of Dairy Bacteria. *Annual Report of Storrs Experiment Station*, 1899.

Use of Bacteria in Food Products. *International Review*, September, 1900.

Microbes in Cheese Making. *Popular Science Monthly*, December, 1900.

The Method of Evolution. G. P. Putnam's Sons, New York, 1900.

PROFESSOR MEAD.—The Graduate Study of Rhetoric. Report of Secretary of the Pedagogical Section of the Modern Language Association of America. Philadelphia, Pa., Dec. 28, 1900.

The Prologue of Chaucer's Wife of Bath's Tale. Chaucer Memorial Meeting, Modern Language Association, Philadelphia, Pa., Dec. 29, 1900.

Publications.—Practical Composition and Rhetoric. pp. xxiv. = 372. Sibley & Ducker, Boston and Chicago, 1900.

Colour in the English and Scottish Ballads, in "An English Miscellany." (Presented to Dr. F. J. Furnivall in Honour of his Seventy-fifth Birthday). Oxford, Clarendon Press, 1901.

Review of Dr. F. Brincker's "Germanische Altertümer in dem Angelsächsischen Gedichte Judith." *Journal of Germanic Philology*, Vol. III., 1901.

PROFESSOR PATON.—*Publication*.—Articles on The Archaeological Institute of America, and Archaeology. *The International Year-Book*, 1899. Dodd, Mead & Co., New York, 1900.

PROFESSOR BRADLEY.—*Lectures*.—Liquid Air. Reed Fund Course, Newton, Mass., Jan. 31, 1901.

The U. S. Life Saving Service. Dalton, Mass., May 10, 1901.

Publication.—Submarine Navigation. *Popular Science Monthly*, December, 1900.

PROFESSOR E. B. VAN VLECK.—On the Convergence of Continued Fractions with Complex Elements. Paper read before the American Mathematical Society, New York, Feb. 23, 1901.

Second paper upon the same subject read before the American Mathematical Society, April 27, 1901.

Publication.—On Linear Criteria for the Determination of the Radius of Convergence of a Power Series. *Transactions of the American Mathematical Society*, July, 1900.

PROFESSOR ROSA.—The Measurement of High Alternating Electromotive Forces. Paper read before the American Physical Society, New York, June, 1900.

On Power Curves drawn on Alternating Current Circuits. Paper read before the American Association for Advancement of Science, New York, June, 1900.

Wattmeter Methods of Measuring Energy Dissipated in Condensers. Paper read before the American Physical Society. February, 1901.

Lectures.—On Electric Lighting. Norwalk, Conn., November, 1900.

On The Electric Spark. Conn. Association of Classical and High School Teachers, Middletown, Feb. 16, 1901.

On The Professional Training of the Teacher of Physics. Eastern Association of Physics Teachers, Boston, Mass., March 2, 1901.

Publications.—The Human Body as an Engine. *Popular Science Monthly*, September, 1900.

Energy and Work of the Human Body. *Popular Science Monthly*, December, 1900.

PROFESSOR FAUST.—The Problematic Hero in German Fiction. Paper read before the Modern Language Association, Dec. 28, 1900, at Philadelphia, and printed in the *Publications of the Modern Language Association of America*, Vol. XVI., No. 1.

PROFESSOR FARRAND.—*Lectures*.—California and Oregon. Vassar Brothers' Institute, Poughkeepsie, N. Y., Feb. 5, 1901.

Expansion. Wells College, Aurora, N. Y., Feb. 8, 1901.

Three lectures on The Territorial Development of the United States. Leland Stanford, Jr., University, Palo Alto, Cal., May 8-11, 1901.

Publications.—The Judiciary Act of 1801. *American Historical Review*, July, 1900.

Territory and District. *American Historical Review*, July, 1900.

Translation of Jellinek's The Declaration of the Rights of Man and of Citizens. Henry Holt & Co., New York, 1901.

DR. BENEDICT.—*Publications*.—The Distillation of Ammonia in the Determination of Nitrogen. *Journal American Chemical Society*, XXII. (1900), 259-263.

The Elementary Composition and Heat of Combustion of Human Fat (with Emil Osterberg). *American Journal of Physiology*, IV. (1900) 69-76.

Elementary Organic Analysis. The Determination of Carbon and Hydrogen, vi. + 86 pp. The Chemical Publishing Co., Easton, Pa., 1900.

Chemical Lecture Experiments, xi. + 437 pp. The Macmillan Co., New York, 1901.

PROFESSOR DODGE.—*Lectures*.—The Theory of Apperception. Two lectures before the Staff of the Connecticut State Hospital for the Insane, Feb. 18, 27, 1901.

Publications.—Visual Perception during Eye Movements. *Psychological Review*, September, 1900.

The Psychology of Reading. *Psychological Review*, January, 1901.

The Angle Velocity of Eye Movements (with Mr. T. S. Cline). *Psychological Review*, March, 1901.

Review of Ernst Dürre's Über die Stroboskopischen Erscheinungen. *Psychological Review*, July, 1900.

Review of E. B. Huey's On the Psychology and Physiology of Reading. *Psychological Review*, July, 1900.

Review of H. Munk's Die Erscheinungen bei kurzer Reizung des Sehorgans. *Psychological Review*, November, 1900.

Review of W. C. Bagley's The Apperception of the Spoken Sentence. *Psychological Review*, March, 1901.

LECTURES.

The following lectures were delivered in Memorial Chapel during the current college year:

Hon. George G. Reynolds, LL. D. (Wesleyan, '41), of Brooklyn, Monday, Dec. 3. Subject:—Trial by Jury.

Professor M. Farrand, Tuesday, Jan. 15. Subject:—Historical Aspects of Expansion.

Professor A. C. Armstrong, Tuesday, Jan. 29. Subject:—The Dreyfus Case.

Professor W. O. Atwater, Tuesday, March 19. Subject:—Tolstoi in Russia.

Rev. W. I. Haven, D. D. ('77), Corresponding Secretary of the American Bible Society, delivered an address in the College Chapel, Sunday afternoon, March 24, on "The Significance and Message of the Old Testament."

THE APOSTLES' CLUB.

The Club has held its regular monthly meetings as usual throughout the College year. The programme for the year has been as follows:

October.—Professor Paton. "Recent Investigations into Early Greek Civilization."

November.—Professor Farrand. "Historical Notes."

Professor Nicolson. "Some Old Records."

December.—Dr. Lease. "Apotheosis among the Ancients."

January.—Professor Fisher. "A proposed Tabular Standard of Values."

February.—Professor Winchester. "The Disappearance of Literature."

March.—Professor Faust. "The Dramas of Gerhart Hauptmann."

April.—Dr. Chase. "Lithuanian Folk-Songs."

May.—Professor Armstrong. "The Appeal to Faith."

MIDDLETOWN SCIENTIFIC ASSOCIATION.

The following subjects have been discussed at the meetings of the Association since the last report in the BULLETIN:

Oct. 16, 1900.—Malaria and Mosquitoes. Professor H. W. Conn.

Nov. 13.—Important Steps in the History of the Liquefaction of Gases. Professor W. P. Bradley.

Dec. 11.—Incandescent Lamps and their Use in Electric Lighting. Professor E. B. Rosa.

Jan. 8, 1901.—The Harriman Alaska Expedition. Dr. Wesley R. Coe.

Feb. 14.—Various Methods of Locating the Origin of Earthquakes. Professor W. N. Rice.

March 12.—The Chemistry of Coal Tar. Dr. F. G. Benedict.

April 15.—Some Strange Theories Regarding the Form and Structure of the Earth. Mr. S. Ward Loper.

April 15.—Recent Developments in Connection with Yellow Fever. Professor H. W. Conn.

May 14.—The Psychology of Reading. Professor Raymond Dodge.

RECENT GIFTS.

The sum of \$45,000 has been subscribed toward the proposed new building, and very considerable additional subscriptions have also been made subject to certain conditions. It is hoped that the whole amount necessary for the building may be secured during the summer, and work begun upon the building by the opening of the next college year.

There has been received from the Methodist Episcopal Church, Middletown, towards the new building, \$1,703.38; towards the current expenses of the library, \$49.40; towards the museum, \$250.00; towards the alumni library fund, \$225.00.

The Middlefield Methodist Episcopal Church has given towards the building, \$100.00.

Four hundred and eighty-three dollars have been received, being the residue of the bequest of the late A. S. Hunt to the library, of which \$26,000 had already been received. The College has appropriated \$517.00 out of the income of the amount already received, which, together with this residue, will make the amount of the Hunt Library Fund at the end of June, \$27,000.00.

One thousand, eight hundred and seventy-five dollars have been returned by the Government, being the amount paid by the College in excess of the requirement of the inheritance tax as now interpreted, on the bequest of the late William E. Sessions.

Six thousand and ten dollars and ninety cents have been received, being one-third of the residue of the estate of the late Joseph S. Spinney.

Nine thousand, five hundred and twenty-five dollars have been received from the estate of the late Daniel Wise, this amount being subject to an annuity in favor of his daughter during her lifetime.

One thousand, three hundred and seventy-five dollars have been paid in on the Alumni Library Endowment Subscription.

Frank S. Jones of Brooklyn has contributed \$600.00 toward the deficit of 1900, and \$600.00 toward the deficit of 1901.

L. D. Mills of Middletown has contributed \$50.00 to each of the deficits, making a total of \$100.

The following sums have been received for the Cryogenic Laboratory — \$25 from Hon. W. W. Wilcox, of Middletown, \$200 from E. C. Snyder, of the class of '94, and \$100 from Hon. W. Murray Crane, of Dalton, Mass.

JUNIOR EXHIBITION

The Annual Junior Exhibition was held in Memorial Chapel on the evening of Thursday, April 25, with a committee of award consisting of Rev. Arthur Henry Goodenough, D. D., of Bristol, Conn., Rev. Samuel R. Colladay, Professor in the Berkeley Divinity School, and Rev. Frederick William Greene, of Middletown. For some years past the decision of the judges has been announced by being merely posted upon the bulletin board, but this year the audience remained until the names of the winners were announced, the half hour of waiting being occupied by the Glee Club. The first prize was awarded to William Gray Harris, of Poultney, Vt., who discussed "The Moral Obligation of the Employer," and the second prize to George Washington Harper, Jr., of Brooklyn N. Y., whose subject was "The Expounder of the Constitution."

JUNIOR DEBATE.

The annual Junior Debate was held in Memorial Chapel on the evening of Tuesday, May 28. For the first time since the debate was established the speakers were appointed after a series of competitive debates. The question discussed was: *Resolved*, That it is expedient that the United States Government own and control the coal mines of the country. The prize was awarded to Charles Elmer Waldron, of Nyack-on-Hudson.

YOUNG MEN'S CHRISTIAN ASSOCIATION.

The following paragraph is abridged from a statement of the conditions and needs of the College Y. M. C. A. by officers of the Association

It has been felt that our Young Men's Christian Association, compared with that of other New England colleges, was neither as efficient nor as active as it ought to be. Bible study, missionary study, and religious interest among the students, as well as Christian work in the city and neighborhood, all have suffered more or less in competition with other forms of college activity. After studying the experiences of other Associations, consulting with the Faculty and with the officers of the International Young Men's Christian Association, the cabinet has come to the conclusion that the best means of increasing the efficiency of the Association and of bringing the spiritual life at Wesleyan to the plane it ought

to occupy, is the establishment of a general secretaryship. It was found that Association work in Brown, Amherst, Dartmouth, Cornell, Syracuse, Yale, Harvard, Princeton, Vermont, and many other eastern and western colleges is now in charge of general secretaries. They have oversight of all the activities of the Association and sustain a general advisory relation to the president and other officers. They organize Bible classes and see that they are kept up. By encouragement and advice to the regular committees they make their influence felt along all lines of regular work, while they give especial attention to planning such new work as is deemed practicable. All these and other urgent local needs demand the time and efforts of a specially designated man. This will entail some additional expense, not so much, however, as might be expected. An advisory committee, composed of alumni and members of the Faculty, has been appointed to take charge of this side of the matter. The undergraduates are making earnest efforts; the Faculty have promised support; to the alumni also the Association looks confidently for help.

LIBRARY.

From November 1, 1900, to April 30, 1901, the sum of \$559 has been received on account of subscriptions to the Alumni Library Endowment. This sum includes \$225 received on account of the Twentieth Century Thank Offering. Through an oversight it was stated in the November BULLETIN that the increase in the Alumni Library Endowment from May 1, 1900, to October 31, 1900, amounted to \$2,011. The increase was \$3,011. The Alumni Library Endowment amounts now to \$29,515.70.

There have been presented to the Library from May 1, 1900, to April 30, 1901, 1,003 bound volumes, 3,099 pamphlets and numbers of periodicals, and 192 maps. In addition 35 periodicals have been received regularly as gifts. The principal donors were the United States Government, the state libraries of Connecticut, New York, and North Carolina, the libraries of Columbia University, Cornell University, and Bowdoin College, the American Bar Association, the Methodist Library of New York, the Minnesota Historical Society, and the following individuals:—Prof. A. C. Armstrong, C. F. Benedict, F. G. Benedict, Prof. H. W. Conn, Hon. S. W. Davenport, '84, Mrs. A. R. Defendorf, Hon. F. A. Defendorf, R. S. Douglass, '61, Prof. M. Farrand, the Misses Gilman, L. R. Hazen, Miss Emily Hoyt, W. J. James, '83, J. S. Judd, '85, Prof. W. E. Mead, '81, Prof. J. M. Paton, Rev. H. A. Philbrook, Hon. O. H. Platt, Rev. S. E. Quimby, '59, H. Raymond, B. A. Rich, '78, Prof. and Mrs. E. E. Salisbury, J. A. Skilton, '49, Hon. N. D. Sperry, Hon. G. H. Tinkham, J. A. Traut, C. S. Wadsworth, Prof. C. T. Winchester, '69, L. I. Wood, '93.

Owing to the growth of the library and the work of reclassification additional shelves for books have become necessary. To meet this need double tiers of shelving are to be built in the alcoves on the second floor. The shelving between the alcoves is in four tiers, each tier being three feet in width. The new shelving will be placed in the centre of each alcove, beginning at the railing and running toward the outer walls of the building. There will be only three tiers instead of four, however, and a table will take the place of the fourth tier. This arrangement will render each alcove available for study as heretofore. The additional shelving will accommodate about 12,000 volumes.

During the coming summer the new classification will be extended to another portion of the library.

MUSEUM NOTES.

A valuable collection of weapons and other articles from the region of the Kongo in West Africa, has been deposited by Mr. Frederick B. Northam, of Chatham, Conn. Mr. Northam was one of Bishop Taylor's party of missionaries who went to Africa in 1884. He traveled extensively in Portuguese West Africa and the Kongo Free State.

Mr. A. R. Crittenden has presented to the Museum numerous specimens, ethnological, botanical, and mineralogical.

A case is now in process of arrangement in which will be exhibited a series of illustrations of the various types of color and luster in minerals.

A collection of minerals and rocks, selected from the duplicates in the Museum, has been presented to the Middletown High School.

The Museum has received from George F. Eaton, Ph. D., of New Haven, a set of the North American *Sphagna*, or peat mosses. The preparation of a series of such sets for distribution was commenced some years ago by Professor Daniel C. Eaton, of Yale University, and Mr. Edwin Faxon, of Jamaica Plain, Mass. The work was interrupted by the lamented death of Professor Eaton in 1895. The preparation of the sets has been completed, however, by Professor Eaton's son, Dr. George F. Eaton, to whose generosity the Museum is indebted for the valuable gift. Specimens of the species and varieties included in these sets were sent by Professor Eaton to Dr. C. W. Warburg, of Neudamm, Germany, from whom valuable suggestions were received in regard to the nomenclature, and who has published a monograph in which all the species of the collection are described. The collection has, therefore, exceptional value as being virtually a collection of types representing a study of that group of plants by two of the most eminent cryptogamic botanists respectively of Europe and America.

In the BULLETIN of last spring was announced the purchase of Mr. Loper's valuable collection of minerals and fossils for the Museum. At that time, four hundred dollars of the required thousand had been raised. A generous contribution of two hundred and fifty dollars has just been received from E. K. Hubbard, Esq., of Middletown. This, with several smaller gifts from other friends of the college, brings the subscription up to seven hundred and fifty dollars—three-quarters of the sum required. Most of the money has been given by citizens of Middletown. It is hoped that the remaining two hundred and fifty dollars will be speedily obtained.

LABORATORY NOTES.

THE BIOLOGICAL LABORATORY.—The experiments which have been conducted in bacteriology upon cream ripening for a number of years have been continued by Prof. Conn and Mr. Esten during the present year. The results of these experiments will appear in the course of the summer in the publications of the Storrs Experiment Station.

THE CHEMICAL LABORATORY.—The researches upon the metabolism of matter and energy in the human body, which have been made for some years past with the respiration calorimeter in the chemical laboratory in coöperation with the U. S. Department of Agriculture and the Storrs Experiment Station, have been continued during the year. The late results bring still more conclusive evidence that the law of the conservation of energy applies in the living organism, and are helping to show how the transformation of energy occurs in the body. Important data are being gathered with regard to the amounts of material and energy used in the performance of muscular work and the values of different foods and their nutrients for this purpose.

The investigations upon the nutritive action of alcohol, conducted under the auspices of the Committee of Fifty for the Investigation of the Drink Problem, have been completed and are about to be published in detail.

Investigations regarding the dietaries for the hospitals for the insane in the State of New York have been continued with the result of establishing a dietary standard for those institutions and the introduction of material improvements in their food economy. An inquiry has also been undertaken into the food and nutrition of the inmates of the Elmira (N. Y.) Reformatory.

The coöperative nutrition investigations, of which Prof. Atwater has charge, under the authority of the U. S. Department of Agriculture, and to which the metabolism experiments above referred to belong, are being prosecuted in a considerable number of university and experiment station laboratories in different parts of the country.

Respiration calorimeters on the plan of the Atwater-Rosa apparatus at Wesleyan are being introduced at the experiment station of the Pennsylvania State College and also in the Institutes of Animal Physiology at Bonn, Prussia, and at Buda-Pesth, Austria-Hungary; in each instance by governmental aid and authority.

An extensive and valuable collection of raw and finished products, illustrating the manufacture of the so-called coal tar dyes, has been presented to the chemical laboratory by Wm. J. Matheson & Co., Ltd., of 182 Front St., New York City, N. Y. In point of size, elegance, and value, such a collection seldom comes into the possession of an American college. Aside from their practical importance, the great theoretical interest of the synthesis of these dyes renders the collection of especial value to the chemical department, furnishing, as it does, abundant material for illustrating lectures on organic chemistry. An appropriate case has been built in the chemical lecture room in which this collection has been placed, together with other collections of specimens of interest to teachers and students of chemistry.

THE CRYOGENIC LABORATORY.—Owing to a variety of unavoidable causes the work of constructing the liquid air plant has been considerably delayed, and will not be completed in all probability till after the coming Commencement. Considerable progress, however, may be reported.

The designs for the liquefier, purchased last year, have been entirely redrawn under the supervision of Mr. Blakeslee, the college mechanician. For the mere production of liquid air, this would not have been necessary, but it was thought desirable, in view of the experimental inquiries which it is hoped may be undertaken with the aid of this apparatus. The changes made will secure more perfect accessibility of all the parts, and will add greatly to the practical value of the liquefier. It is believed that the improvements thus made will, in the end, amply justify the loss of time and the expense which they have occasioned.

After careful inquiry as to the best kind of tubing to be used in the construction of the liquefier, choice finally fell upon the seamless drawn copper tubing manufactured by the Benedict & Burnham Co., of Waterbury. Practically the entire list of tubing required, in value about one hundred dollars, was given to the College by this company, free of expense. This gift is deserving of special mention, coming as it does from those who were unconnected in any way with Wesleyan.

All of the main castings which enter into the construction of the liquefier, and many of the smaller parts are now completed, and it is hoped that the work of assembling may soon begin.

The four stage compressor, constructed from original designs with special reference to its experimental use in this plant, has already received its preliminary tests at the factory in South Norwalk, and will probably be on the ground

in a week or two. As has been stated in a previous number of the BULLETIN, this compressor is the gift of Mr. E. Hill, of the class of '70. The six-horse power motor which will drive the compressor was purchased some time since, and is now in place in the laboratory.

While the low temperature investigations for which the cryogenic laboratory is chiefly intended have not of course been possible as yet, some experimental inquiries involving the use of high pressures have already yielded interesting results. An account of these will appear in due time in one of the scientific periodicals.

Gifts toward the establishment of the new laboratory have been generous, but a considerable sum is still imperatively needed to complete the construction and installation.

THE PHYSICAL LABORATORY.—A dynamo capable of lighting 300 incandescent lamps was added to the equipment of the electrical laboratory last December, and it has since been used regularly for lighting some of the college buildings, and for furnishing current to three arc lamps on the campus.

The steam engine and dynamo have been operated by students of the electrical department. The cost of the electric current generated is enough less than commercial rates to pay for the dynamo and auxiliary apparatus in about three years.

THE PSYCHOLOGICAL LABORATORY.—During the past year two series of investigations in physiological optics have been completed; both of which have been productive of theoretical results of considerable value. The first series was to determine the nature of visual perception during eye movement; the second was a quantitative study of the eye movements with particular reference to the psychology of reading. The latter series involved the designing and construction of entirely new registering apparatus, with which the first accurate measurements of the eye movements have been effected.

COMMENCEMENT LUNCHEON.

For two years past, the number of friends of the alumni attending the Commencement Luncheon has been so large as to tax to its utmost the seating capacity of the Gymnasium where the luncheon is served. The Executive Committee of the Trustees, therefore, have thought it necessary to adopt the following rule:—"Every member of the Board of Trustees and of the Faculty, every alumnus and invited guest, will be furnished, on application, one ticket to the luncheon, and may purchase one other ticket at the price of one dollar."

It is believed that this may reduce somewhat the attendance upon the luncheon, but will make it more distinctively an alumni gathering.

OBITUARY RECORD.

The following deaths among the Alumni have been reported since the publication of the last Obituary Record:

CLASS.

1836. William Hezekiah Nathaniel Magruder, b. 31 December, 1815, in Jefferson Co., Miss.; d. 9 March, 1900.
1837. George Kellogg, b. 19 June, 1812, in New Hartford, Conn.; d. 6 May, 1901, in New Hartford, Conn.
1838. Loren Laertes Knox, b. 8 January, 1811, in Nelson, Madison Co., N. Y.; d. 18 January, 1901, in Evanston, Ill.
1839. Albert Franklin Park, b. 11 December, 1814, in Preston, Conn.; d. 9 October, 1900, in Cooktown, Conn.
1844. George Hedding Wiley, d. 21 September, 1899, in Jackson, La.
1845. Moses Clark White, b. 24 July, 1819, in Paris, N. Y.; d. 24 October, 1900, in New Haven, Conn.
1849. Almon Orson Cooley, d. September, 1899, in Fredericksburg, Texas.
1849. George Worthy Quereau, b. 9 June, 1827, in Stanford, N. Y.; d. 11 April, 1900.
1851. Arthur Benjamin Calef, b. 30 June, 1825, in Sanbornton, N. H.; d. 17 August, 1900, in Middletown, Conn.
1851. Charles Frederick Gerry, b. 3 June, 1823, in Sudbury, Mass.; d. 4 September, 1900, in Sudbury, Mass.
1851. Nicholas Henry Rightor, b. in Donaldsonville, La.; d. 11 August, 1900, in New Orleans, La.
1855. William Xavier Ninde, b. 21 June, 1832, in Cortlandville, N. Y.; d. 3 January, 1901, in Detroit, Mich.
1857. Robert Clark, b. 13 September, 1831, in Landgrove, Vt.; d. 25 January, 1901, in Providence, R. I.
1859. George Edwin King, b. 8 October, 1839, in St. John, N. B.; d. 7 May, 1901, in Ottawa, Canada.
1861. John Storry Breckenridge, b. 12 July, 1837, in Augusta, N. Y.; d. 28 August, 1900, in Stamford, N. Y.
1864. Edward Hiller Breckenridge, b. 24 May, 1835; d. 9 January, 1901, in Washington, D. C.
1869. Samuel Emery Holden, b. 3 February, 1845, in West Concord, N. H.; d. 31 December, 1900, in Altruria, Cal.
1873. George Washington Shonk, b. 26 April, 1850, in Plymouth, Pa.; d. 14 August, 1900, in Washington, D. C.

CLASS.

1876. Everett Fremont Adams, b. 18 March, 1855, in East Boothbay, Me.;
d. 3 June, 1900, in Council Bluffs, Iowa.
1892. Henry Winfield Millison, b. 4 October, 1866, in Philadelphia, Pa.; d.
30 December, 1900, in West Chester, Pa.
1892. Jonathan Hugh Slater, b. 23 September, 1865, in East Jewett, N. Y.;
d. 22 September, 1900, in Brooklyn, N. Y.
1896. Richard Reed Reynolds, b. 5 July, 1869, in Redrust, Cornwall, Eng.,
d. 4 June, 1901, in Alamagodo, New Mexico.



CALENDAR.

1901.

- June 21, Friday, 7:30 P. M.,—Freshman, Sophomore, and Junior Prize Declamation.
- June 23, Sunday, 10:30 A. M.,—Baccalaureate Sermon, by the Rev. Bradford Paul Raymond, D. D., LL. D.
- June 23, Sunday, 7:30 P. M.,—University Sermon, by the Rev. William F. McDowell, D. D., Corresponding Secretary of the Board of Education of the Methodist Episcopal Church.
- June 24, Monday, 11:00 A. M.,—Public Awarding of Prizes. Address by Justice David J. Brewer, LL. D., of the U. S. Supreme Court.
- June 24, Monday, 2:00 P. M.,—Class Day Exercises.
- June 24, Monday, 8:00 P. M.,—Annual Meeting of Board of Trustees.
- June 24, Monday, 8:00 P. M.,—Glee Club Concert.
- June 25, Tuesday, 9:00 A. M.,—Meeting of the Φ. B. K. Fraternity.
- June 25, Tuesday, 10:00 A. M.,—Business Meeting of the Alumni Association.
- June 25, Tuesday afternoon—Reunion of Classes of 1851, '76, '86, '91, '94, '98.
- June 25, Tuesday, 3:00 P. M.,—Oration before the Φ. B. K. Society by Charles Emory Smith, Postmaster-General.
- June 25, Tuesday afternoon—Receptions by the College Fraternities.
- June 26, Wednesday—COMMENCEMENT.
- June 26, Wednesday afternoon,—Commencement Dinner.
- June 26, Wednesday evening,—President's Reception.
- June 27, Thursday, 9:00 A. M.,—Examination of candidates for admission begins.
- Sept. 25, Wednesday, 9:00 A. M.,—Examination of candidates for admission begins.
- Sept. 26, Thursday, 9:00 A. M.,—First Term begins.

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WESLEYAN UNIVERSITY BULLETIN.

MIDDLETOWN, CONN.

NOVEMBER, 1901.—No. 29.

FOR many years the financial exhibit of Wesleyan University has justly been a source of pride to the friends of the institution. So generous were the gifts and so skillful the placing of investments by the Treasurer, that Wesleyan passed easily through the recent trying years of financial panic and made steady additions to her material equipment and to her faculty. So striking was her prosperity that reference was not infrequently made to Wesleyan as a "rich college" that needed no more money. In comparison, however, with the needs of the various departments Wesleyan has never been rich. There has never been a time when a million of dollars could not have been advantageously used in strengthening and extending the work of every department.

As matters stand to-day, we are compelled to say plainly that there is immediate and urgent need of increased endowment. If rates of interest had remained where they were some years ago, there would probably be sufficient funds at the disposal of the Treasurer for meeting without difficulty the annual expenditure. But the safe investment of trust-funds compels in most cases the choice of securities yielding comparatively low rates of interest; and this fact, together with the unavoidable increase of expenditure incident to growth, makes necessary a renewed appeal to the generosity of the well-wishers of the University.

In the course of the past ten years, apart from the unexpected Fayerweather bequest, there has been only one considerable addition to the general endowment in the form of money immediately usable, though there have been some gifts not yet available for current expenditure as well as gifts and bequests for special purposes.

In view of these facts comment is hardly called for. A plain statement of the situation makes clear the urgent necessity of adding at once not less than \$250,000 to the general endowment in order to meet the annual outlay.

We are still compelled to report that the new building so pressingly needed for recitation rooms and administrative purposes is not yet begun. The subscription list already shows an encouraging number of pledges, but a considerable sum is still required before the work can be safely undertaken. This building is not merely desirable but is really essential to the effective work of several of the largest departments. When this fact is clearly understood we may well hope that the desired subscriptions will be forthcoming without delay.

Following the editorial notes are presented some passages from a Report to the Trustees of Wesleyan University concerning Courses of Instruction and Equipment. In this report are set forth some of the reasons why a number of new buildings and an increased endowment are an urgent need at the present moment.

The generous bequest of \$20,000 to the Library endowment fund by the late Mrs. Stephen Wilcox, of Brooklyn, worthily takes its place beside the bequest of Dr. Albert S. Hunt to the same fund. The recognized importance of the Library as the central department to which every other department of the University is closely related will justify still other gifts,—particularly for the purchase of books too costly to be added by any single department.

For the first time in fifteen years the Freshman class this year is somewhat smaller than was expected. The causes for the diminution will doubtless be variously assigned, but they need not be regarded as other than temporary. Loyal support and active personal effort on the part of the friends of the University will doubtless enable us to continue the steady progress which has marked our recent history.

On the occasion of the recent Bi-centennial Celebration of Yale University a congratulatory Latin address, engrossed and illuminated in the style of fifteenth century Latin manuscripts, was presented by the President and Faculty of

Wesleyan to the President and Faculty of Yale. Wesleyan was officially represented by President Raymond, Vice-President Van Vleck, Professors Atwater and Rice. By the courteous invitation of the Committee of Arrangements a delegation of twenty-five Wesleyan students marched in the great parade of Monday, October 21st. Harvard, Princeton, and Trinity were each represented by the same number. Among the honorary degrees conferred the degree of Doctor of Divinity was given to President Raymond.

It is with regret mingled with some pride that we announce the appointment of Professor Rosa as Physicist of the important Bureau of Standards recently established by the United States Government at Washington. The work to be done by this Bureau has heretofore been carried on at much inconvenience and expense by being distributed where the necessary determinations could be made, especially among similar bureaus in Europe. The new institution with its laboratories is expected to be one of the best equipped in the world.

Professor Rosa will continue his work at Wesleyan for the remainder of the present college year, and will at the same time superintend the plans for the new laboratory at Washington.

The Supplement to the Alumni Record, which is to appear shortly, will be materially enlarged by the addition of a list of the honorary alumni, with the addresses of the living, and the date of death of the deceased. An interesting feature of the Supplement will be a list showing the geographical distribution of all the alumni.

The following extracts from a long Report to the Trustees of the University point out some important considerations with regard to our needs in the immediate future. To be really appreciated they should be read in connection with the full report, but they will at least call attention to some matters too commonly overlooked:

"Believing that the first requisite of a good college is a strong faculty, the authorities of Wesleyan have wisely devoted the greater portion of the funds that have come to us in the past quarter century to the increase of our teaching force. In the mean time, however, we have not made an equal advance in buildings and material equipment. Notwithstanding the fact that the sciences of Physics, Chemistry, Biology, and Geology have been so largely

developed within the last twenty-five years, Wesleyan has not erected within that time a single building for scientific purposes; and although in the same time our students have increased two-fold, and instructors and courses of instruction more than two-fold, yet we have had only a very small increase in the number of class-rooms. Indeed, the Gymnasium and boiler-house are the only new buildings erected for thirty years. The foremost need at the present moment is a large and well equipped building for lecture and recitation purposes. Such a building, costing about \$100,000, would provide perhaps three large and ten medium-sized lecture rooms, and officers' studies and seminary rooms for the following nine departments: 1, Latin; 2, Greek; 3, German; 4, Romance Languages; 5, English Literature; 6, English Language; 7, Philosophy; 8, History; 9, Economics and Social Science. Such a building would also provide for such growth as may be expected for some years to come.

Other buildings that must, if possible, be erected in the near future are a Physical Laboratory, with rooms for the Mathematical Department; a Chemical Laboratory; an Astronomical Observatory; a Woman's Building. A moderate estimate of the cost of these buildings, with adequate equipment, is \$375,000. This is a large sum of money. Yet even when we add what has been expended by Wesleyan for buildings in the last quarter of a century we have a smaller sum than other New England colleges of similar size and rank have devoted to this purpose in the same period.

The founders of Wesleyan University intended that she should afford her students instruction of the highest grade. It is our duty to carry out this noble purpose not only by holding Wesleyan up to the high rank she has heretofore maintained but by excelling the past. The scope of our higher institutions of learning has been vastly broadened in the last generation. The several branches of science included within our curriculum have been greatly developed in the last quarter of a century; and the demand for full and thorough instruction in these sciences makes necessary almost as large a teaching force for them alone as the entire faculty twenty-five years ago. But the instruction in History, Economics, Modern Languages and Literature has been increased almost as much, while even in Latin, Greek and Mathematics the amount of instruction now given is double what it was a quarter of a century ago. It is the development of the elective system and the demand for ampler and more thorough instruction in all departments, in harmony with the general advance in educational standards, which has necessitated a relatively large faculty. There are unquestionable advantages in the condition of a small college with a large faculty. The larger the ratio of teachers to students the more of individual attention will be given to each student and the more of personal influence will be exerted. But this condition is peculiarly uneconomical. A small college must have a much greater endowment relatively than a large one in order to

afford instruction equal in quantity and quality. To double the number of our students would add something to the cost of instruction, but the added cost would be more than covered by the fees received from the additional students. Three hundred and fifty additional students paying tuition would add at least \$25,000 to our annual revenues, a sum equivalent to the income on half a million dollars. Twenty thousand dollars of this would provide fifteen additional instructors and associate professors, and with this increased force our curriculum could be strengthened and the larger classes handled quite as well as our present faculty can care for 350 students. The remaining \$5,000 per year could then be used for supplies. If we had the buildings and equipment above specified, we believe that students would come to us in far greater numbers, and our influence and usefulness would be correspondingly increased. A considerable initial outlay would therefore be in the interests of true economy.

A college of 200 or 300 students could be conducted economically a generation ago; the more extensive curriculum of to-day makes this no longer possible. In other words, the size of the faculty required is determined more by the courses of instruction offered than by the number of students attending them; and since a small faculty cannot compete in the breadth and thoroughness of its instruction with a larger one, it follows that because of its larger faculty the larger college offers superior advantages. It is for this reason that the faculty of Wesleyan has grown faster than its body of students. The size of the faculty cannot now be reduced without crippling our work; indeed, in some places it needs to be still further strengthened.

Our seemingly extensive curriculum is therefore by no means an evidence of extravagant notions of what Wesleyan should be and do. No fact is more obvious in regard to the educational life of to-day than the advance in the ideals of educational institutions. The high schools and academies have teachers of more advanced special training than had the colleges of fifty years ago. The better class of colleges are aspiring after the ideal of the university. The word university, in recent usage, does not mean necessarily an institution with a group of professional schools, but it does mean an institution in which instruction of a far more advanced grade than that of the old-fashioned college curriculum is given to both undergraduates and graduates, in which original investigation is actively carried on by instructors and graduate students, and which is recognized as a center of intellectual light and influence in the world of thought. In that sense of the word, Wesleyan, like some other educational institutions of moderate size, has asserted her claim to be recognized as a university. That claim must be maintained and justified by ampler achievement. To allow the institution to settle down into the exclusive teaching of comparatively elementary courses would be to be false to the high purposes and aspirations which animated its brave and far-seeing founders in the days of poverty and struggle.

We should be content with nothing less than to see Wesleyan maintain herself among the best of the higher institutions of learning; not becoming as large as the greatest of our universities, and probably possessing no professional schools. But in the breadth and thoroughness of her scholarship, in her output of literary and scientific research, and in her intellectual leadership she should stand in the front rank of American Universities."

TRUSTEE MEETING.

An adjourned meeting of the Board of Trustees of Wesleyan University was held in New York City on June 6, 1901. Twenty members were present. The President of the University presented his report for the year.

The following persons were reappointed:

James M. Paton, Ph. D., to be Associate Professor of Greek for two years.

George D. Chase, Ph. D., to be Instructor in Latin for one year.

Albert B. Faust, Ph. D., to be Associate Professor of German for one year.

Francis G. Benedict, Ph. D., to be Instructor in Chemistry for one year.

Frederick C. Ostrander, B. A., to be Tutor in Modern Languages for one year.

William M. Esten, M. S., to be Assistant in Biology for one year.

Harry T. Baker, B. A., to be Assistant in English for one year.

Miss Anna A. Fisher, M. A., to be Dean of Women for one year.

The following new appointments were made:

George M. Dutcher, B. A., to be Associate Professor of History for one year.

Arthur C. Lunn, M. A., to be Instructor in Mathematics and Astronomy for one year.

Miss Days E. Defendorf, Ph. B., to be Assistant Librarian for one year.

Arthur W. Browne, B. S., to be Assistant in Chemistry for one year.

Josiah W. Taylor, to be Assistant in the Library for one year.

During the summer Arthur W. Browne resigned, and the Executive Committee appointed Thomas J. Bryan, Ph. D., to be Assistant in Chemistry for one year.

Rev. Henry A. Starks, D. D., LL. D., was elected Financial Secretary for one year.

The question of a new building was referred to the General Executive Committee with power.

NOTES OF THE LAST COMMENCEMENT.

TRUSTEE MEETING.—The annual meeting of the Board of Trustees was opened on the evening of Monday, June 24, 1901, and was concluded on the following day. Twenty-eight members were present. Hon. George C. Keynolds, LL. D., was reelected President of the Board, Rev. Edmund M. Mills, Ph. D., D. D., Secretary, and John E. Andrus, Treasurer. The Treasurer presented his annual report, which was accepted and placed on file.

The Board considered the resolutions of the Alumni Association regarding the mode of electing Trustees, which were published in the BULLETIN for November, 1900. H. C. M. Ingraham, D. W. Northrop and W. V. Kelley, the committee to which this matter had been referred, made the following report:

Your Committee recommend the adoption of the first paragraph of the alumni resolutions, provided it be amended so as to read as follows:—namely.

“That the Librarian be directed immediately upon the close of the ballot for the nomination of candidates to notify the persons chosen as nominees, and that in case any of the nominees decline to stand as candidates, such fact be submitted to the President of the University, who may, in his discretion, thereupon communicate with such nominees, and if they shall still decline to stand as candidates, such fact be stated upon the second circular sent to the alumni and the names next in order in the nominating ballot be added to complete the number of six nominees.”

Your Committee recommend the adoption of the second paragraph of the alumni resolutions. Your Committee recommend the adoption of so much and so much only of the third paragraph of such resolutions as reads as follows, to wit:—

“That the Librarian be directed in sending out the second circular with the names of the candidates, to give the name, class, residence, and vocation of the candidates.”

Your Committee does not approve of the adoption of the alumni resolution that the Trustees elected during Commencement week should take office at the close of the Commencement season during which they were elected.

Your Committee does not approve of any change in the size or constitution of the Board of Trustees.

This report was adopted with the exception of the last paragraph, consideration of which was deferred until the mid-winter meeting.

The following Trustees were reelected: James M. Buckley, James H. Alexander, Frank S. Jones, and Henry C. M. Ingraham, their terms to expire in 1907. James N. Brown was elected Trustee in place of Andrew Longacre, his term to expire in 1907, and Harry H. Benedict in place of Letson Ferrell Wooster, his term to expire in 1906.

The report of the Visiting Committee was presented by F. Mason North, and on motion was approved and placed on file.

The President of the University was authorized to confer the following honorary degrees: The degree of Doctor of Divinity upon Rev. David Howard Tribou, Senior Chaplain in the United States Navy, Rev. Thomas Bond Wood, of the class of 1864, of Lima, Peru, and Rev. Thomas Hinckley Gilbert Mitchell, of the class of 1873, Professor of Hebrew and Old Testament Exegesis in Boston University; the degree of Doctor of Laws upon Hon. David Josiah Brewer, Associate Justice of the Supreme Court of the United States, and Hon. Charles Emory Smith, Postmaster-General of the United States.

As Visiting Committee for the year 1901-1902 were appointed John H. Coleman, F. Mason North, Edward O. Thayer.

The Academic Council was authorized to affix the name of Hollis to some chair, to be determined by it later.

The following resolution was adopted:

Resolved, That a committee of five, consisting of the President of the Board of Trustees, the President of the University, the Treasurer, Mr. W. R. Walkley, and Mr. W. E. Sessions, be and they are hereby appointed to apportion the income of the University for the coming year to the various requirements, and to submit a report before September 15, to the General Executive Committee for adoption.

The President of the University was authorized to grant free tuition to an amount not exceeding \$12,000.

Richard G. Povey, B. S., was appointed to be Assistant in Physics for one year.

The title of Francis G. Benedict, Ph. D., was changed from Instructor to Associate Professor of Chemistry.

[During the summer David C. Hall, Ph. B., of Brown University, was appointed Director of the Gymnasium for one year to fill the vacancy caused by the retirement of Frederick W. Marvel.]

ALUMNI ASSOCIATION.—The annual meeting of the Association was held on Tuesday of Commencement Week, with President Joseph Pullman in the chair. The following officers were elected for the year 1901-1902: *President*, C. E. Davis, '76; *Vice-Presidents*, W. D. Leonard, '78, D. G. Downey, '84, and S. V. Coffin, '89; *Recording Secretary*, E. B. Van Vleck, '84; *Corresponding Secretary*, W. J. James, '83; *Treasurer*, J. E. Loveland, '89; *Executive Committee*, Herbert Welch, '87, E. B. Birdsey, '71, E. G. Derby, '83, M. B. Crawford, '74, W. U. Pearne, '74.

Hon. Darius Baker, '70, was reelected Alumni Trustee, and Rev. David G. Downey, '84, was elected Alumni Trustee in place of Rev. George H. Whitney, '58.

C. E. Bacon, '78, was appointed a member of the Library Committee.

The greater part of the time was given to a consideration of the needs of the University. After a full discussion the following resolutions were unanimously adopted:

Resolved, 1. That it is the profound conviction of the Alumni meeting assembled at Wesleyan University, this 25th day of June, 1901, that the interests of our *Alma Mater* demand that all friends of the University should unite heartily in the effort to secure an ample endowment and buildings for the University.

Resolved, 2. That we pledge ourselves as a body and as individuals to our best endeavor in the above direction.

A committee of five with power to carry these resolutions into effect and to add to their number was appointed as follows:—D. G. Downey, '84, W. V. Kelley, '65, F. M. North, '72, F. D. Beattys, '85, and F. M. Davenport, '80.

NOTES.—Although President McKinley was unable to be present, the Commencement Week was marked by some exercises of unusual interest. The customary Award of Prizes on Monday morning was preceded by an address on "Character looked upon from a National Standpoint," by Mr. Justice Brewer of the Supreme Court of the United States, whose earnest, thoughtful and dignified presentation of lofty yet thoroughly practical ideals was one of the most notable and admirable utterances of our recent Commencements.

On Tuesday afternoon a public meeting of the Connecticut Gamma of the Phi Beta Kappa Fraternity was held in the Middlesex Opera House. In the absence of President J. C. Van Benschoten, who was detained by illness, Vice-President W. N. Rice presided. The oration was delivered by Hon. Charles Emory Smith, Postmaster-General of the United States, whose subject was "American Development and Destiny." The address was a vigorous defense and justification of recent events by an appeal to the past history and present necessities of the nation.

THE FINANCES.—The following is a brief statement of the property of the College, according to the most recent appraisal, and of the income and expenditure for the financial year 1900-1901:

Property of the University.

Invested funds and productive real estate,	-	-	-	\$1,344,953 14
College buildings and campus,	-	-	-	531,300 00
Scientific collections and apparatus,	-	-	-	85,455 00
Library,	-	-	-	55,000 00
Unproductive real estate,	-	-	-	13,304 31

Furniture in various college buildings, - - - -	\$12,480 00
Cash, - - - - -	47,357 95
Total, - - - - -	<u>\$2,089,850 40</u>

Receipts from May 31, 1900, to May 31, 1901.

Students' bills,* - - - - -	\$37,451 96
Interest on investments and rents, - - - -	62,543 32
Women's Dormitory, - - - - -	4,729 00
Commons, - - - - -	4,084 03
Special subscription for Cryogenic Laboratory, - -	325 00
Special subscriptions for deficit of 1900, - - -	1,650 00
Special subscriptions for deficit of 1901, - - -	650 00
Special subscriptions for other purposes, - - -	324 40
Miscellaneous, - - - - -	870 01
Balance advanced by Treasurer, May 31, 1901, - -	22,010 29
Total, - - - - -	<u>\$134,638 01</u>

Expenditures from May 31, 1900, to May 31, 1901.

Salaries, - - - - -	\$64,935 00
Fuel, light, water, insurance, - - - - -	6,580 14
Janitorial service, - - - - -	4,417 47
Repairs and improvements, - - - - -	5,820 56
Women's Dormitory, - - - - -	5,453 66
Commons, - - - - -	4,341 96
Department appropriations, - - - - -	2,375 57
Library and Reading Room, - - - - -	1,627 88
Museum, - - - - -	342 26
Cryogenic Laboratory, - - - - -	994 03
Mechanical Laboratory, - - - - -	632 92
Gymnasium, - - - - -	107 21
Aid to students—tuition, - - - - -	13,126 00
Interest, annuities, and scholarships, - - - -	3,838 30
Printing, postage, catalogues, bulletins, etc., - -	2,843 74
Miscellaneous, secretarial assistance, Commencement expenses, prizes, etc., - - - - -	5,316 03
Balance due Treasurer, May 31, 1900, - - - -	11,885 28
Total, - - - - -	<u>\$134,638 01</u>

* Inclusive of \$13,126 tuition remitted.

APPOINTMENTS TO THE FACULTY.

GEORGE M. DUTCHER, elected Associate Professor of History, received the degree of B. A. from Cornell University in 1897. He passed the three following years at Cornell as private secretary to Professor H. Morse Stephens, and as a graduate student of History. From 1898-1900 he was also Assistant in English History. The academic year 1900-'01 was spent in travel and study in Europe as President White Fellow in History of Cornell University.

ARTHUR C. LUNN, elected Instructor in Mathematics, received the degree of B. A. from Lawrence University in 1898. The three following years were spent as a graduate student of Astronomy and Mathematics at the University of Chicago, where he was Fellow in Mathematics from 1898-1900, and received the degree of M. A. in the latter year.

DEPARTMENT NOTES.

GERMAN.—A change has been made in the subject of the German Seminary (Course IX.) from "German Fiction," as stated in the Announcement, to "Advanced Middle High German." Wolfram von Eschenbach's "Parzival" will be studied. The course is designed for post-graduate students and candidates for special honors in German. In addition to the courses announced, V. German (Goethe and Schiller), will in part be repeated, because of a request by members of the Senior class who were unable to elect the course last year. The class will study Goethe's Faust and the life and works of Goethe.

ENGLISH LITERATURE.—Professor Winchester offers this year to the Senior class a new course of study upon the Essayists and Reviewers of the Early Nineteenth Century.—Jeffrey, Hazlitt, Lamb, De Quincy, Wilson, and Hunt.

HISTORY.—Professor Dutcher in taking charge of the History department has adopted an arrangement of courses somewhat different from that followed by Professor Farrand. The two-hour course in General History for the Sophomores has been replaced by a similar course in English History. The advanced courses offered this year are two hours in American Colonial History to the close of the Revolutionary War, and three hours in Modern European History from 1600 to 1890. During the second half year there will be a seminar course open to Seniors.

CHEMISTRY.—A new practical course (X.) is offered this year by Professor Benedict. The course aims at developing a knowledge of General and Analytical Chemistry based on the periodic classification of the elements. The quantitative relations existing in chemical reactions are emphasized as far as is

possible without encroaching on the domain of quantitative analysis. The acquisition of experimental data illustrating the basis of the chemical laws is an important phase of the work.

A portion of the year will be devoted to the principles of analysis and the development of simple analytical methods.

The course while essentially new in design is planned to be the educational equivalent of qualitative analysis. Accordingly in all courses for which qualitative analysis has hitherto been a prerequisite N. Chemistry will now be accepted as its equivalent.

PRACTICAL BIOLOGY.—Beginning with this year a change is made in the courses in Practical Biology by which the laboratory is thrown open to Sophomores. Hitherto the laboratory work in Biology has been open to Juniors and Seniors only. The present arrangement will be continued hereafter, and make it possible for a student to continue work uninterruptedly through his college course. A number of Sophomores have made use of this new elective for the present year.

THE LIBRARY.

Of the subscriptions to the Alumni Library Fund, the sum of \$4,610 has been paid in the six months from May 1st to November 1st. Of this sum \$3,500 was given by Mr. J. E. Andrus, of the class of '62. The Alumni Library Fund now amounts to \$34,155.70.

Two recent gifts to the Library deserve mention here, one of \$50 by Miss Alice B. Guy of the class of '98 at Vassar, now a graduate student at Wesleyan, for the purchase of books for the German department, and the other the sum of \$20,000, left by the will of Mrs. Stephen Wilcox of Brooklyn, N. Y., who died August 21, 1901. The latter is the most notable gift to the Library since the receipt of the Hunt bequest.

The following facts concerning the increase in the number of volumes, the circulation of books, and the progress made in the work of classification may be of interest: The number of volumes added to the Library from June 1, 1900, to May 31, 1901, was 2,023. They were obtained as follows: By purchase, 489; by binding periodicals and pamphlets, 123; by exchange, 59; by gift, 1,447. Deducting 95 volumes, exchanged or withdrawn, there remains a net addition of 2,023 volumes. The total number of volumes in the Library at the present time is 61,000.

From June 1, 1900, to May 31, 1901, 7,275 books and periodicals were drawn from the Library for home use. In addition 1,155 volumes were withdrawn from circulation and reserved either in the Library or in seminary rooms.

One-half of the new shelving placed in the alcoves on the second floor is already in use. The attractiveness of the alcoves for purposes of study is undoubtedly diminished by this addition, but their practical usefulness is not much affected and the relief afforded is considerable.

The reclassification work of the past year, done for the most part during the summer, covered general periodicals, church history, and biography, about 6,000 volumes in all. The total number of volumes classified is 30,000. Of the 31,000 volumes unclassified about one-half are in urgent need of classification. The remainder, consisting of government publications, some special collections, and uncatalogued gifts, may be dealt with gradually after the books in history, geography, travel, and in the political and social sciences have been classified.

During the summer the 5,300 volumes of the Hunt Library were labeled, and entered in the accession book. A card shelf-list was likewise prepared. The cards are arranged alphabetically by authors for the present, and will serve as a catalogue to the Hunt collection until the cataloguing of the books can be properly attended to.

THE MUSEUM.

Mr. Loper spent the months of June and July and a considerable part of August in geological work in Cape Breton, under the auspices of the U. S. Geological Survey. He collected great quantities of Cambrian fossils, which have been sent to the office of the Survey in Washington. Mr. Loper's work was of great importance in determining the true geological position of the strata to which the name Etcheminian has been applied by Dr. G. F. Matthew. The conclusions to which Mr. Loper's researches point will not be published until after the thorough study of the collections by Mr. Walcott, the Director of the U. S. Geological Survey. Since the finishing of Mr. Loper's work under the auspices of the Survey, the local collectors who were employed as his assistants have made additional collections for the Museum of Wesleyan University. One box of the fossils has already been received.

A valuable collection of birds, made by the late W. W. Coe of Portland, has been deposited in the Museum by his son and daughter, Mr. William F. Coe and Mrs. Charles H. Coles. Mr. Coe was an earnest student of the birds of this vicinity, and an enterprising collector. The collection is of special value as illustrating one department of our local natural history. Mr. Coe was a skillful and artistic taxidermist, and many of the birds mounted by his own hand are remarkably life-like and spirited. The collection includes two hundred and fifty-eight mounted specimens and eighty-six unmounted skins. It is contained in two large and elegant black-walnut cases.

The collection of minerals of Edwin F. Sheldon, formerly of Middletown, has been received at the Museum. A subscription is in progress to raise the sum of five hundred dollars to purchase the collection from Mrs. Sheldon for the Museum. It contains many beautiful and valuable specimens.

SPECIAL INVESTIGATIONS AT WESLEYAN.

The Respiration Calorimeter.—The respiration calorimeter has now been in successful operation for several years. Already 44 experiments, made with five different men, and covering altogether 134 days and nights, have been completed. The individual experiments have been carried out with more than usual detail and accuracy and the investigations have already assumed unusual dimensions. Part of the results have already been printed. A large portion of the rest are in process of publication. It may be said that the general result scarcely falls short of definite and final demonstration that the law of the conservation of energy applies in the living organism. The data obtained throw much light upon various phases of the metabolism of matter and especially of energy in the body. With the rest, the measurements of the quantities of material and energy consumed by the body under various conditions of work and rest are such as to give most valuable information upon this subject and consequently upon the needs of the body for food. While the inquiry is primarily of an abstract scientific nature, practical results of much value are being obtained. A not inconsiderable share of the whole work thus far has been given to the development of the apparatus and methods of inquiry which are largely new. At present the apparatus is being rebuilt in order to introduce changes which experience has suggested. It is expected, however, that experimenting will be resumed some time in the winter. The research is prosecuted under the auspices and with the financial aid of the federal and state governments, and is a part of a general inquiry regarding food and nutrition which is authorized by Congress and carried out in coöperation with universities, colleges, experiment stations and other organizations in different parts of the United States. This general inquiry is under the authority of the Secretary of Agriculture, by whom it is placed in the charge of Professor Atwater. The special work with the respiration calorimeter is done in coöperation with the Storrs Experiment Station.

Investigations upon the Bacteria of Milk.—The trustees of the Institute of Medical Research recently founded by John D. Rockefeller decided to devote the funds immediately at their disposal for last summer to the study of the public milk supply, with special reference to milk as a means of distributing disease. Professor Conn was requested to undertake a part of this work which especially

related to the bacteria of milk. This work was begun in the Biological Laboratory at Wesleyan and carried out during the summer by Professor Conn with the assistance of Mr. Esten, '94, Mr. R. H. Burr, '90, and Mr. W. A. Stocking, of the Storrs Experiment Station. The investigations have not yet been completed and at a recent meeting of the trustees of the Rockefeller Institute it was decided to continue the work that has been begun here for some time longer. It is expected that for the present college year these experiments will be continued under the direction of Professor Conn in the Biological Laboratory at Wesleyan and at the Storrs Experiment Station.

RECENT COLLEGE APPOINTMENTS.

CLASS.

- 1878. John Pancoast Gordy, Professor of the History of Education, School of Pedagogy, New York University.
- 1887. William Trafton Randall, Dean of the University of Southern California, Los Angeles.
- 1891. Frank Bowers Littell, Professor of Mathematics, U. S. Navy.
- 1892. Harvey Carson Grumbine, Professor of English Literature, Washington University, St. Louis.
- 1892. Olin Freeman Tower, Associate Professor of Chemistry, Adelbert College, Western Reserve University.
- 1893. Charles Gourlay Goodrich, Acting Professor of Modern Languages, Marietta College, Ohio.
- 1893. Vida Frank Moore, Professor of Philosophy, Elmira College.
- 1894. Abraham Howry Espenshade, Assistant Professor of English and Rhetoric, State College, Pennsylvania.
- 1894. Charles Hubbard Judd, Professor of Psychology and Pedagogy, University of Cincinnati.
- 1894. Edwin Bryant Nichols, Assistant Professor of the Romance Languages, University of Cincinnati.
- 1895. Norman Everett Gilbert, Professor of Physics, Hobart College.
- 1895. Colbert Searles, Associate Professor of Modern Languages, University of Arkansas.
- 1895. Edward Lee Thorndike, Adjunct Professor of Genetic Psychology, Teachers' College, Columbia University.
- 1898. Philip Bovier Hawk, Assistant in Physiological Chemistry, College of Physicians and Surgeons, Columbia University.

1899. Herbert Spencer Davis, Instructor in Vertebrate Zoölogy, Washington Agricultural College, Pullman, Wash.
1899. Edwin Walter Kemmerer, Instructor in Economics and History, Purdue University, Indiana.
1900. Arthur Wesley Browne, Graduate Scholar in Chemistry, Cornell University.
1901. Richard Granville Povey, Assistant in Physics, Wesleyan University.

Arthur Whitmore Smith, M. S., 1895, has been appointed Professor of Electricity and Electrical Engineering in the University of Mississippi.

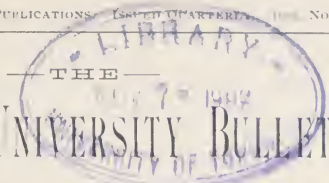
CALENDAR.

1901.

- Sept. 26, Thursday, 9:00 A. M.,—College year began.
- Nov. 27, Wednesday, 12:00 M.,—Thanksgiving recess will begin.
- Dec. 1, Sunday, 8:50 A. M.,—First chapel exercise after the close of the Thanksgiving recess.
- Dec. 23, Monday, 5:00 P. M.,—Christmas recess will begin.

1902.

- Jan. 7, Tuesday, 8:00 A. M.,—Christmas recess will end.
- Jan. 30, Thursday,—Day of Prayer for Colleges.
- Feb. 3, Monday,—Feb. 15, Saturday,—Mid-year examinations.
- Feb. 22, Saturday,—Washington's Birthday,—a holiday.
- Mar. 26, Wednesday, 12:00 M.,—Spring recess will begin.
- April 1, Tuesday, 8:00 A. M.,—Spring recess will end.
- April 17, Thursday,—Junior Exhibition.
- May 30, Friday,—Memorial Day,—a holiday.
- June 25, Wednesday,—COMMENCEMENT.


 THE

WESLEYAN UNIVERSITY BULLETIN.

MIDDLETOWN, CONN.

JUNE, 1902.—No. 30.

AT THE Commencement season of 1903, Wesleyan University will celebrate the bi-centennial of the birth of John Wesley. Such a celebration would not be in accord with the traditions and aims of the University, were it to lay emphasis solely upon Wesley's work in quickening the religious life of the world, immeasurable as the importance of that work was. His influence as a humanizing and civilizing force, as an educator, in the broadest sense, demands equal recognition. It is therefore in no narrow and sectarian spirit that Wesleyan University will join in doing honor to the great reformer and scholar whose name she bears. Her ideal, since the foundation, has been to provide a broad and scholarly collegiate training, not inferior in quality to that offered by any similar institution in this country. But it is a significant fact that although from the outset the institution has stood for the principle of Christian education, it has never been narrowly denominational, and its curriculum has included no courses in theology. From the outset, however, manly character has been regarded as no less important than scholarship; and the history of the University as shared by alumni, students, and faculty has been, we trust, not out of harmony with the catholic spirit and broad vision of the founder of Methodism.

The much-desired lecture hall, the need of which has been so often emphasized in these pages, is soon to be a reality. Pledges amounting to \$100,000 have been secured, and immediate steps are to be taken toward construction. A variety of important questions relating to the building site, the number and size of class-rooms, and many other matters, must of course be settled before the actual work of building can begin, but it is hoped that some definite report can be made at the coming Commencement.

Through the generosity of a friend of the University, who prefers for the present to remain unknown, the sum of \$75,000 has been given for the erection of a new building for scientific purposes. Details concerning the site, the internal arrangements, and the probable date of completion have not yet been determined.

We must not lose sight of the fact that the up building of the permanent endowment fund is still an urgent necessity. Generous giving has largely wiped out the deficit of the past two years. But until the endowment is raised to a point where our income from low rates of interest will equal the income we had when rates of interest were high, we must face an annual deficit or must cripple incalculably the work of every department. The latter alternative is one that no friend of Wesleyan will for a moment consider. There is, therefore, no escape from the obligation resting upon every alumnus and every genuine well-wisher of the institution, to build up by all suitable means an endowment fund that shall be adequate to the needs of our equipment and our work.

The minute adopted by the Faculty on the death of Professor Van Benschoten and printed in this issue of the BULLETIN, expresses in some measure the feeling of deep personal loss sustained by his colleagues and daily associates. His influence and his interests extended far beyond the limits of his own department and his own circle of students. His noble and impressive figure, his courtly and tactful bearing, his genial and hearty sympathies, his almost life-long devotion to the University, his genuine and unaffected piety—all these will long live in the memory of those who knew him and loved him.

All who are interested in the athletic side of our college life will be gratified to learn that the former popular Director of the Gymnasium, Mr. Marvel, has been reappointed to his position.

Worthy of mention, too, is the fact that a covered grand-stand, which has long been regarded as a necessity for the proper seating of spectators at games, is in process of erection on Andrus Field.

THE WESLEY BI-CENTENNIAL

The 25th of June, 1903, will be widely celebrated as the two hundredth anniversary of the birth of John Wesley. And deservedly so. For John Wesley was not merely the leader of a great religious reform and the founder of a great religious denomination that has spread around the world. The movement with which his name is associated touched every department of thought and life in the England of the eighteenth century. Measured by the breadth, intensity, and permanence of his influence, it is perhaps not too much to say that John Wesley was the greatest Englishman of his age.

And it would seem that there could be no place in America more fitting for such a celebration than Wesleyan University. Wesleyan University is the oldest, and in some respects the most important, of the colleges under the patronage of the Methodist church in America. Its founders and early supporters, the generation of Fisk and Olin, were the men who first made Methodism a recognized force in the thoughtful and scholarly life of the country; and the college, through all its history, has stood for that union of religion with solid learning, that broad outlook upon all the interests of men, that fearless love of truth, which characterized the life and work of the great man whose name it bears.

The Commencement week of 1903 will, therefore, be mostly occupied with exercises connected with this anniversary. Distinguished speakers from both sides of the Atlantic may be expected, and it is believed that the occasion will call together not only a large number of the alumni and patrons of the University, but prominent representatives of school, church, and state from all parts of the country. It is yet too early to announce a definite programme, but there will probably be appropriate addresses on Sunday, Monday, and Tuesday evenings, with other formal exercises befitting the occasion. Further statements will be given in the November BULLETIN. It will be of interest to many to state that Professor Woodrow Wilson has already accepted the invitation to deliver the address of Tuesday evening, on The Historical and Social Significance of the Wesleyan Movement.

It is probable, moreover, that the two new buildings already provided for will be ready for dedication at that time; perhaps a third. And the organized effort now making for a large increase in the endowment of the University should have yielded definite results by that time, so that the occasion may well mark the beginning of a new chapter in the history of the Wesleyan University.

JAMES COOKE VAN BENSCHOTEN.

The following minute on the death of Professor Van Benschoten was adopted by the Faculty on Jan. 28, 1902:

We desire to express our sense of the loss sustained by Wesleyan University in the death of Professor James Cooke Van Benschoten, and our own deep feeling of personal bereavement in the loss of a colleague so long respected and beloved.

Professor Van Benschoten became a member of this faculty almost thirty-nine years ago, when the faculty numbered only seven. Through all the long period of growth and expansion since that time, he has filled the chair of Greek with an ability that maintained the reputation and influence of the department, and that commanded the respect of the successive generations of his pupils. He was a careful, thorough instructor, with a quick perception for all the felicities of language, and a most hearty enthusiasm for the best things in Greek letters and art. In all his relations with his students he showed a natural distinction, a certain refinement and urbanity of manner, which seemed a reflection of the humanizing studies to which his life was devoted. His own scholarship was attested by the recognition of the most eminent men in his department of study, and by the various positions of honor held by him in the academic world. Throughout the long period of his service, he was most loyally devoted to the interests of the college; and Wesleyan University will sadly miss his labors, his counsels, and his influence.

But it is as the companion and friend that we, his colleagues, most keenly feel the loss of Professor Van Benschoten. Many of us came to know him first when we were students in his class-room. To the elder members of our circle, the daily college life can never seem the same now that he has gone out of it; and all of us, from the oldest to the youngest, had come to admire him for his scholarly tastes, his fine courtesy, his hearty sympathy. His rare culture and his racy humor made him a most delightful companion. He surrendered nothing to the advancing years, and retained his vigor and alertness of mind and body quite down to the days of his last illness. He was a most sympathetic and friendly man; students and faculty alike can bear testimony to many instances of his thoughtful kindness in times of perplexity or trial. Nor can we forget that crowning grace of his character, a firm and quiet Christian faith, which gave a noble consistency to his long career.

For almost two score years he exemplified here the virtues of the scholar, the gentleman, the Christian; and now that he has gone, his memory will be an abiding inspiration to us who remain.

TRUSTEE MEETING.

An adjourned meeting of the Board of Trustees was held in the Mission Rooms, 150 Fifth Avenue, New York, April 18, 1902.

The following new appointments were made:—

George D. Chase, Ph. D., to be Associate Professor of Latin for one year.

Raymond Dodge, Ph. D., to be Professor of Psychology.

Frederick W. Marvel, Ph. B., to be Director of the Gymnasium for five years, and to be a member of the Faculty.

Walter G. Cady, Ph. D., to be Instructor in Physics for one year.

The following persons were reappointed:—

Albert B. Faust, Ph. D., to be Associate Professor of German for one year.

George M. Dutcher, B. A., to be Associate Professor of History for one year.

William M. Esten, M. S., to be Assistant in Biology for one year.

Miss Days E. Defendorf, Ph. B., to be Assistant Librarian for one year.

Harry T. Baker, B. A., to be Assistant in English for one year.

Miss Anna A. Fisher was reappointed Dean of Women for one year.

The Board approved a recommendation from the Academic Council that the college accept membership in a proposed board composed of representatives of seven or more New England colleges, to determine the schools which shall have the certificate privilege; and the Board authorized the expenditure of whatever money may be necessary to pay the share of the college in the expenses of the Board.

It was voted to change the Commencement season for 1903 by making Sunday, the 28th of June, Commencement Sunday.

DEPARTMENT NOTES.

LATIN.—The proffer of Latin courses for the year 1902-1903 will be somewhat conditioned by the fact that Associate Professor Chase must give part of his time to a course supplementing the reduced work in Greek, and that Professor Merrill expects to be absent in Italy during the second half-year. The Freshman work, and the two courses in Prose Composition, will be given as usual. Of reading courses open to Sophomores Professor Merrill will give during the first half-year the usual courses in Cicero's Letters, and in the Odes and Epodes of Horace. He will also give during the first half-year a course of illustrated lectures on Roman Private Life, twice a week, planned to cover the same field as his usual course that extends through the year, but condensed and simplified, chiefly by the omission of details, and of the discussion of original authorities. During the second half-year there will be open to Sophomores a

course by Associate Professor Chase in the Satires and Epistles of Horace, and a course in the rapid reading of easy authors by Associate Professor Nicolson. The aim in this course will be to read large amounts, with a view to acquiring facility in the use of Latin. The selections to be read will be chosen for their interest and their literary value. The first readings will be from the later books of Vergil's *Aeneid*. Then will be read Cicero's *Treatise on the Nature of the Gods*. The rest of the course will be devoted, as time may allow, to selections from the following:—The Elegiac Poets (Ovid, Tibullus, Propertius), Suetonius's *Lives*, Gellius's *Anecdotes*, the *Comedies* of Plautus and Terence.

Of courses open to Juniors and Seniors Professor Merrill will give during the first half year his usual courses in the *Annals* of Tacitus and in Roman Epigraphy. Associate Professor Nicolson will give during the first half-year the course in Ovid's *Fasti*, and Associate Professor Chase will give twice a week through the year a course on the Historical Development of Greek and Latin, which is described under Greek. Other Latin courses will be suspended for the year.

GREEK.—As the vacancy caused by the death of Professor Van Benschoten is to remain unfilled for the coming year, it has been necessary to make a temporary reduction in the number of courses offered to Juniors and Seniors. Courses I. and II. will remain substantially unchanged. Course III. (one hour a week) will treat of the Private Life of the Ancient Athenians. Though intended for Sophomores, the course will be open to all who take or have taken Course II. Course IV. (three hours a week) will be a reading course for those who have taken Course II. In the first half year Thucydides will be read, and in the second Euripides. Course V. (two hours a week) will treat of the Historical Development of Greek and Latin. The course will include a study of selected inscriptions illustrating the languages in their dialects and at different periods in their history, an examination from the original sources of the ancients' knowledge of linguistic study, and a discussion of the relationship of the two languages. It will be open to those who have taken Course II. Courses I. to IV. will be given by Associate Professor Paton; Course V. by Associate Professor Chase.

ROMANCE LANGUAGES.—There will be two new courses given in this department next year; one in the elements of Spanish, and another on the history of French literature, with especial attention to its sources and its influence on the literatures of other countries.

The course in I. Italian will be omitted next year, and that in II. Italian will be reduced to one hour a week counting as two hours. This latter arrangement will hold only for next year.

ENGLISH LANGUAGE.—There will be offered next year a new course of a popular, untechnical character, on the history of the English language. The aim of this course will be to show in lectures and class discussions how English words have been made, how they have changed their sounds, their forms, and their meanings, how and when foreign words have been borrowed, and, in particular, how American English differs from that of England. For this course no knowledge of Anglo-Saxon is required. The principal collateral reading will be based upon Greenough and Kittredge's "Words and their Ways in English Speech." This course will be elective for Juniors. (Two hours a week.)

PHILOSOPHY.—Owing to the assumption of the course in Ethics by Professor Dodge, the course of Readings in Modern Philosophy will be given next year by Professor Armstrong.

Room No. 4 S. C., formerly the Greek seminary room, has been assigned to the Department of Philosophy for seminary use. By this assignment it will be possible to reserve No. 7 S. C. exclusively for laboratory purposes.

The quantitative study of the eye movements which was commenced last year in the Psychological Laboratory, with the aid of a new type of registering apparatus, has been continued this year, with especial reference to the visual perception of motion. A duplicate of the Mirror Tachistoscope, designed by Professor Dodge for the experimental study of the psychology of reading, has been constructed for the Psychophysical Institute of the University of Bonn, Germany.

ETHICS.—The course in Ethics will be given next year by Professor Dodge, and that in Evidences by Professor Rice.

CHEMISTRY.—Professor Bradley began at mid-year a new course on the liquefaction of Gases. The lectures aim to present a clear picture of the fundamental relations of the liquid and the gaseous states of matter, and of the more notable achievements in the mastery of low temperatures. They are illustrated by diagrams and by experiments.

Since the last report, the following sums have been received for the Cryogenic Laboratory: \$50, Dr. O. S. Watkins; \$100, Mr. L. F. Fabner; \$25, L. O. & E. S. Davis; \$350, Hon. E. K. Hubbard; \$50, Mr. W. B. Brewer; \$50 from a graduate whose name is withheld by request, \$100, Mr. B. A. Brooks, 71, Brooklyn, N. Y.; and \$25, Mr. A. N. Pierson Cromwell.

In addition, a second consignment of copper tubing for experimental work was contributed by the Benedict & Burnham Mfg. Co., of Waterbury, through the courtesy of Mr. E. L. Frisbie, Jr., president of the company, also from the American Sparklets Co., of Bridgeport, a complete set of specimens illustrative of the steps in the manufacture of the little steel capsules of liquid carbon dioxide known by the trade name of "Sparklers," which are used for carbonating beverages.

FACULTY LECTURES AND PUBLICATIONS.

PROFESSOR RICE.—*Lectures*.—The Poet of Science. Annual Address, Wesleyan Academy, Wilbraham, Mass., June 19, 1901.

The Epoch of Evolution. Annual Address, State Normal and Training School, New Haven, Conn., June 24, 1901.

Methodism, Old and New. Epworth League Conventions, Nashua, N. H., Sept. 18, 1901, Springfield, Mass., Nov. 6, 1901.

Science Teaching in Schools. Address at organization of Teachers' School of Science Association, Boston, Mass., Sept. 28, 1901.

The Volcanic Region of Central France. Sigma Xi Society, Yale University, Jan. 15, 1902.

The Physical Geography of Connecticut. Bridgeport Scientific Society, Bridgeport, Conn., March 4, 1902.

PROFESSOR ATWATER.—*Lectures*.—Dietaries of Insane Hospitals and other Institutions. National Conference of Charities and Correction, Washington, D. C., May 14, 1901.

Nutrition Investigations. Lake Placid Conference on Home Economics, Morningside, N. Y., July 2, 1901.

Nutritive Values of Ordinary Foods and Alcohol. Hartford Medical Society, Hartford, Conn., Dec. 16, 1901.

The Work of the Storrs Agricultural Experiment Station. Connecticut State Board of Agriculture, Bridgeport, Conn., Dec. 19, 1901.

Alcohol Physiology in the Public Schools. New York State Science Teachers' Association, Syracuse, N. Y., Dec. 28, 1901.

Tolstoi in Russia. University Club, Syracuse, N. Y., December 29, 1901.

What the Storrs Experiment Station is Doing for the Connecticut Dairymen. Connecticut Dairymen's Association, Hartford, Conn., Jan. 23, 1902.

Industrial and Agricultural Education; and Diet for the Insane. Two lectures before the First Cuban Conference of Charities and Correction, Havana, Cuba, March 19-22, 1902.

Higher Duties of Citizenship; Nutrition Investigations; The Higher Education of Women. Addresses given in Athens, Ga., at the University of Georgia, State Normal School and Lucy Cobb Institute, March 27, 1902.

Late Results of Metabolism Experiments. New York Section American Chemical Society, New York, N. Y., April 11, 1902.

Conservation of Energy in the Living Organism. University Club, Providence, R. I., April 19, 1902.

Publications.—Results of Experiments on the Metabolism of Matter and Energy in the Human Body (with F. G. Benedict and others). *Annual Report Storrs Agricultural Experiment Station*, 1900.

The Effect of Severe and Prolonged Muscular Work on Food Consumption, Digestion and Metabolism (with H. C. Sherman). *Bulletin No. 28 of the Office of Experiment Stations, U. S. Department of Agriculture*, 67 pp.

Experiments on the Metabolism of Matter and Energy in the Human Body, 1898-1900 (with F. G. Benedict and others). *Bulletin 100 of the Office of Experiment Stations, U. S. Department of Agriculture*, 147 pp.

Principles of Nutrition and Nutritive Value of Food. *Farmer's Bulletin No. 142, U. S. Department of Agriculture*, 48 pp.

An Experimental Inquiry regarding the Nutritive Value of Alcohol (with F. G. Benedict). *Sixth Memoir, Vol. VIII., of the Memoirs of the National Academy of Sciences, Washington, D. C.*, 162 pp.

PROFESSOR WINCHESTER.—*Lectures*.—Four lectures on the Poetry of the Early Nineteenth Century, before the University of Wisconsin, Feb. 10-14, 1902.

Lecture on Modern Hymnology, before Methodist Social Union of Boston, Nov. 18, 1901.

Other lectures in Philadelphia, Baltimore, Salem and Lawrence, Mass., Wilkes-Barre, Pa., Norwich, Waterbury, Norwalk, Conn., and in various schools.

During the past year the following volume has been issued in the Athenaeum Press Series under the general editorial control of Professor Winchester and Professor G. L. Kittredge, of Harvard University:—*Selections from DeQuincey*. Edited by Milton H. Turk. Boston, Ginn & Co., 1902.

PROFESSOR CONN.—*Publications*.—Milk for Babies. *American Kitchen Magazine*, June, 1901.

Sea Worms. *Popular Science*, June, 1901.

The Ripening of Cream (with W. M. Esten). *Cent. of Bulletin, Part II.*, vii., p. 743. Also in *Annual Report of Storrs Experiment Station*, 1900.

Le développement comparatif des différentes espèces microbiennes dans le lait. *Rev. Gen. du Lait*, I., p. 121.

Variations. The Building Stones of Evolution. *The Independent*, March 20, 1902.

Variations in Animals and Plants. *The Independent*, March 27, 1902.

Agricultural Bacteriology. pp. 412. *P. Blakiston's Son & Co.*, 1901.

Lectures.—The Relation of Bovine to Human Tuberculosis. Bridgeport Scientific Association and the Brooklyn Institute.

Agricultural Bacteriology. St. Botolph Club, Boston, May 21, 1902.

PROFESSOR ARMSTRONG.—*Lecture*.—Typical Eras of Skepticism. Philosophical Club, Bryn Mawr College, Jan. 10, 1902.

Aspects of Contemporary Thought. Three lectures before Hartford Theological Seminary, February-March, 1902 (the third part of the third lecture published in *The Hartford Seminary Review*, May, 1902).

Publications.—Contributions to Baldwin's Dictionary of Philosophy and Psychology. Vol. I. The Macmillan Company, New York and London, 1901.

Contributions to the fourth edition of Falckenberg's Geschichte der neueren Philosophie. Veit & Co., Leipzig, 1902.

Review of Moore's Ethical Aspect of Lotze's Metaphysics. *Philosophical Review*, January, 1902.

PROFESSOR MEAD.—*Address.*—The Undergraduate Study of Rhetoric. Report of Secretary of the Pedagogical Section of the Modern Language Association. Harvard University, Dec. 26, 1901.

Lecture.—Summer Travel in Iceland (illustrated). Holyoke, Mass., Jan. 13, 1902.

Publications.—The Prologue of Chaucer's Wife of Bath's Tale. *Publ. of Mod. Lang. Assoc.*, Vol. IX., pp. 388-404.

The Graduate Study of Rhetoric. *Publ. of Mod. Lang. Assoc.*, Vol. IX. pp. xx.-xxxii.

The Undergraduate Study of Rhetoric. *The School Review* (Chicago), May, 1902.

"Commendry." *Mod. Lang. Notes*, November, 1901.

PROFESSOR PATON.—*Publications.*—Articles on The Archæological Institute of America, and Archæology. *The International Year-Book*, 1900, and 1901. Dodd, Mead & Co., New York, 1901, and 1902.

The Antigone of Euripides. In *Harvard Studies in Classical Philology*, XII. 1901 (Goodwin Volume). Harvard University, Cambridge, Mass., 1901.

PROFESSOR BRADLEY.—*Publication.*—A Thermostat Sensitive to a Thousandth of a Degree. *Journal of Physical Chemistry*, February, 1902.

PROFESSOR KUHN.—*Lectures.*—The Story of the Troubadours. The Tuesday Club, Poughkeepsie, N. Y., March 26, 1902.

Switzerland. East Hampton, Conn., April 21, 1902.

Publications.—The German and Swiss Settlements of Colonial Pennsylvania; A Study of the so-called Pennsylvania Dutch. New York, 1901, H. Holt & Co.

Studies in the Poets of Italy. Chautauqua Reading Course for 1901-1902. Cleveland, 1901.

Three articles on Rome, Venice, and Switzerland. *The Chautauquan*, October, November, 1901, and May, 1902.

Review of C. A. Dinsmore's Teaching of Dante. *Methodist Review*, January-February, 1902.

Review of *Strenna Dantesca*. *Modern Language Notes*, April, 1902.

PROFESSOR E. B. VAN VLECK.—*Publications.*—On the Convergence of Continued Fractions with Complex Elements. *Transactions of the American Mathematical Society*, July, 1901.

On the Convergence and Character of a Certain Class of Continued Fractions. *Transactions of the American Mathematical Society*, October, 1901.

On the Convergence of the Continued Fraction of Gauss and other Continued Fractions. Paper read at the summer meeting of the American Mathematical Society, Ithaca, N. Y., Aug. 20, 1901. Published in the *Annals of Mathematics*, October, 1901.

A Determination of the Number of Real and Imaginary Roots of the Hypergeometric Series. Paper read before the American Mathematical Society, Oct. 26, 1901. Published in the *Transactions of the American Mathematical Society*, January, 1902.

Review of E. Borel's *Leçons sur les séries divergentes*, and of J. Hadamard's *La Série de Taylor et son prolongement analytique*. *Science*, March, 1902.

PROFESSOR CHASE.—Latin Verbs in *-cinari*. Paper read before the American Philological Association, July, 1901. An abstract published in *Proceedings of the American Philological Association*, Vol. XXXII, 1901.

PROFESSOR FAUL.—*Lecture*.—Goethe's Weltanschauung. Germanic Association of Graduate Students, University of Pennsylvania, Feb. 20, 1902.

PROFESSOR BENEDICT.—*Lecture*.—Some Aspects of Ventilation. Paper read before the New York Section of the American Chemical Society, Dec. 6, 1901.

Publication.—A Study of the Food Consumed and Digested by Four Members of the Harvard University Boat Crew in June, 1900. *The Boston Medical and Surgical Journal*, Vol. 144. [with W. O. Atwater.]

Eine neue Methode um Körpertemperaturen zu messen. *Archiv für die gesamte Physiologie*, Bd. 28. [with J. F. Snell.]

The Excretion of Nitrogen during Nervous Excitement. *American Journal of Physiology*, Vol. VI.

Experiments on the Metabolism of Matter and Energy in the Human Body. *Bulletin 109 Office of Experiment Stations, Washington, D. C.* [with W. O. Atwater and with the cooperation of A. I. Bryant, M. S., A. W. Smith, M. S., and J. F. Snell, Ph. D.]

An Experimental Inquiry Regarding the Nutritive Value of Alcohol. *Memorie of the National Academy of Sciences*, Vol. VIII, Sixth Memoir. [with W. O. Atwater.]

Körpertemperatur-Schwankungen mit besonderer Rücksicht auf den Einfluss, welchen die Umkehrung der täglichen Lebensgewohnheit beim Menschen ausübt. *Archiv für die gesamte Physiologie*, Bd. 29. [with J. F. Snell.]

A Chemical Method for obtaining Vacua. *American Journal of Science and Arts*, XXVII., No. 5. [with Claudius R. Manning.]

PROFESSOR DODGE.—*Publication*.—Christianity and Sin. *Methodist Review*, November-December, 1901.

The Act of Vision. *Harper's Magazine*, May, 1902.

Review of E. Storch's Ueber die Mechanischen Correlate von Raum und Zeit. *Psychological Review*, January, 1902.

Review of E. B. Huey's on the Psychology and Physiology of Reading, II. *Psychological Review*, January, 1902.

PROFESSOR DUTCHER.—*Publication*.—Review of Biré's Le Clergé de France endant la Révolution. *American Historical Review*, April, 1902.

LECTURES.

The following lectures were delivered in Memorial Chapel during the current college year:

Rev. W. V. Kelley, D. D., LL. D. (Wesleyan, '65), of New York, Thursday, Dec. 5. Subject:—A Knight of the Nineteenth Century.

Professor O. Kuhns, Tuesday, Dec. 17. Subject:—Switzerland.

Dr. G. D. Chase, Thursday, Jan. 16. Subject:—Did the Indo-Europeans come from Asia?

Professor F. G. Benedict, Tuesday, Jan. 23. Subject:—The Chemistry of Magic.

Professor W. C. Fisher, Tuesday, Feb. 25. Subject:—Scientific Charity and Christian Charity.

Professor C. T. Winchester, Thursday, March 13. Subject:—William Hazlitt.

Professor G. M. Dutcher, Thursday, March 20. Subject:—The Historical Treatment of Infamous Characters.

APOSTLES' CLUB, 1901-1902.

October.—Prof. Fisher. "Anarchism."

November.—Mr. James. "An Old Law-suit."

December.—Prof. Nicolson. "Greek Athletics."

January.—Prof. Faust. "Goethe's Weltanschauung."

March.—Prof. Mead. "Some Aspects of American English."

April.—Prof. Kuhns. "Some Italian Universities."

May.—Dr. Chase. "The Cape Cod Dialect."

MIDDLETOWN SCIENTIFIC ASSOCIATION MEETINGS.

Oct. 15, 1901.—Bovine and Human Tuberculosis. Prof. H. W. Conn.

Nov. 12.—Adulteration of Foods. Mr. A. L. Winton.

Dec. 10.—Use of Aluminum as a Fuel. Dr. T. J. Bryan.

Dec. 10.—River Terraces. Prof. William North Rice.

Jan. 14, 1902.—The History of Vaccination and its Relation to Smallpox. Dr. E. A. Darling.

Feb. 18.—Air and Storm Phenomena. Prof. Willis L. Moore.

March 11.—The Borderland of Insanity. Dr. A. R. Delendorf.

April 8.—The Temperature of the Human Body. Prof. F. G. Benedict.

May 13.—The History of Telescope Lenses. Mr. A. C. Lunn.

Recent Developments in Biological Chemistry. Prof. H. W. Conn.

RECENT GIFTS.

The sum of \$100,000 has now been subscribed for the new recitation hall, and \$16,254 have been paid in since June 1, 1901. A friend of the college, whose name has not been made public, has offered to give \$75,000 for a new building for scientific purposes, and another has promised \$25,000 toward another new building.

Thirty-five thousand dollars have been received, being one-half of the residue of the estate of the late William H. Hollis, of the class of 1854.

Members of the Middletown Methodist Episcopal Church have given \$100 for the Electrical Laboratory, as part of the Twentieth Century offering.

Fourteen thousand, nine hundred dollars have been received on account of subscriptions toward current expenses.

Gifts for special purposes, to the Library, Museum, and Cryogenic Laboratory, are recorded elsewhere in the BULLETIN.

JUNIOR EXHIBITION.

The annual Junior Exhibition was held in Memorial Chapel on the evening of Thursday, April 17. The committee of award, consisting of Rev. Frederick William Greene, B. A., Hon. Silas Arnold Robinson, and Mr. Henry Charles Whittlesey, B. A., gave the first prize to Olin Mason Caward, of Prattsburg, N. Y., who spoke on *The Ruling Spirit*; and the second prize to James Garfield Berrien, of Montclair, N. J., who discussed the character of *William II. of Germany*.

LIBRARY.

From November 1, 1901, to April 30, 1902, the sum of \$442 has been received on account of subscriptions to the Alumni Library Endowment. This sum includes \$37 received on account of the Twentieth Century Thank Offering. The Alumni Library Endowment and the Hunt Library Endowment amount together to \$61,597.70.

There have been presented to the Library during the year ending April 30, 1902, 1,212 bound volumes, 5,618 pamphlets and numbers of periodicals, and one map. In addition 35 periodicals have been received regularly as gifts. The largest single gift of the year consisted of 418 bound volumes, 21 pamphlets and 109 packages of clippings from the library of the late Rev. Joseph Pullman, D. D., class of 1863, presented by his widow. Other principal donors were the United States Government, the state libraries of Connecticut, Massachusetts, and New York, the Connecticut Gamma of Phi Beta Kappa, the Yale Corporation, Price, Lee & Co., and the following individuals:—Prof. A. C. Armstrong, S. V. Coffin, '89, Rev. J. C. W. Coxe, '63, Prof. M. B. Crawford, '74, Mr. and Mrs. E. G. Derby, Hon. D. J. Donahoe, Prof. M. Farrand, Prof. W. C. Fisher, the Misses Gilman, G. S. Godard, '92, Miss A. B. Guy, L. R. Hazen, A. H. Hoyt, '50, W. J. James, '83, Prof. W. E. Mead, '81, Prof. J. M. Paton, Hon. O. H. Platt, Hon. W. U. Pearne, '74, H. Raymond, R. F. Raymond, '81, B. A. Rich, '78, Hon. N. D. Sperry, Hon. T. F. Temple, and Prof. C. T. Winchester, '69.

During the coming summer the new classification will be extended to another portion of the library.

THE MUSEUM.

In the BULLETIN one year ago it was announced that three-quarters of the thousand dollars to be paid for the Loper Collection of minerals and fossils had been raised. The amount has now been completed by the gift of one hundred and fifty dollars (in addition to previous contribution) from Mr. A. R. Crittenden, and gifts of fifty dollars each from Mrs. Horace F. Boardman and Mr. Clarence S. Wadsworth. The complete list of subscribers is as follows:—Mrs. Horace F. Boardman, Daniel H. Chase, LL. D., A. R. Crittenden, E. K. Hubbard, Charles S. Leavenworth, B. A., Mrs. Julia H. Leavenworth, George T. Meech, Middletown Scientific Association, Rev. John T. Pettee, M. A., Prof. William North Rice, O. E. Stoddard, M. W. Terrill, Clarence S. Wadsworth, H. C. Whittlesey, W. W. Wilcox, W. W. Wilcox, Jr. The Loper collection includes many valuable specimens; but what makes it especially important to the Museum is the very fine series of the Triassic fishes from Middlefield, Durham, and Guilford. It is the special duty of every museum to preserve and display specimens illustrating as fully as possible the natural history of the region in which it is situated.

Rev. Charles H. Buck, D. D., has given one hundred dollars, which has been applied to the purchase of fossils and Indian relics from Connecticut, which had been deposited in the Museum by Mr. A. R. Crittenden. This gift, accordingly, helps in the development of the Museum in respect of local collections.

OBITUARY RECORD.

The following deaths among the Alumni have been reported since the publication of the last Obituary Record:

Class.

1838. Artemas Bigelow, b. 4 July, 1818, in Springfield, Mass.; d. 26 November, 1901, in Vineland, N. J.
1839. Lansing Porter, b. 8 March, 1817, in Auburn, N. Y.; d. 12 January, 1902, in Auburn, N. Y.
1843. William Duval, b. 3 February, 1822, in New York, N. Y.; d. 12 February, 1902, in Brooklyn, N. Y.
1845. John Wesley Beach, b. 26 December, 1825, in Trumbull, Conn.; d. 1 January, 1902, in Middletown, Conn.
1847. Edwin Chauncy Griswold, b. 18 May, 1827, in Farmington, Conn.; d. 22 March, 1901, in Elyria, Ohio.
1850. George McKendree Steele, b. 13 April, 1823, in Strafford, Vt.; d. 14 January, 1902, in Kenilworth, Ill.
1851. James Monroe Carroll, b. 21 April, 1828, in Arcadia, N. Y.; d. 5 December, 1901, in New Haven, Conn.
1852. George William Wendell, b. 11 March, 1831, in Dover, N. H.; d. 18 February, 1902, in Cambridgeport, Mass.
1854. George Elliott Waite, d. 5 June, 1901, in Geneseo, N. Y.
1858. Thomas Russell Eganbrack, b. 19 August, 1835, in Ephrata, N. Y.; d. 4 August, 1901, in Dubuque, Ia.
1858. Nathaniel Fellows, b. 19 November, 1828, in Stonington, Conn.; d. 20 July, 1901, in Lynn, Mass.
1863. Gilbert Holmes Gregory, b. 28 November, 1837, in Modena, N. Y.; d. 30 September, 1900, in Kingsbridge, N. Y.
1863. Joseph Pullman, b. 22 February, 1839, in Skerries, Ireland; d. 4 January, 1902, in Stamford, Conn.
1864. Stephen Augustus Snow, b. 17 November, 1842, in Providence, R. I.; d. 20 August, 1901, in Pittsburg, Penn.
1865. Salmon Durance Jones, b. 5 April, 1837, in White Mills, Penn.; d. 29 July, 1901, in Ocean Grove, N. J.
1865. Charles Wesley Wilder, b. 22 February, 1837, in Granville, Vt.; d. 24 May, 1901, in S. Walpole, Mass.
1868. Charles Lewis Bonnell, b. 15 October, 1846, in Brooklyn, N. Y.; d. 15 January, 1902, in Brooklyn, N. Y.
1869. Harvey Woodward, b. 18 July, 1841, in Gilsam, N. H.; d. 10 April, 1902, in Natick, Mass.
1872. Eugene Alonzo Webster, b. 16 February, 1849, in Montpelier, Vt.; d. 17 September, 1901, in Orangeburgh, S. C.

1876. William Copeland Wallace, b. 21 May, 1856, in Brooklyn, N. Y.; d. 4 September, 1901, in Warwick, N. Y.
1884. Carlton Bannister, b. 1861; d. 22 April, 1902, in Convent, N. J.
1899. Julia Gertrude Bevin, b. 16 September, 1873, in East Hampton, Conn.; d. 13 March, 1902, in East Hampton, Conn.
1899. Francis Augustus Sargent, b. 26 October, 1877, in Boston, Mass.; d. 14 February, 1902, in New York, N. Y.

CALENDAR.

1902.

- June 20, Friday, 7:30 P. M.—Freshman, Sophomore, and Junior Prize Declamation.
- June 22, Sunday, 10:30 A. M.—Baccalaureate Sermon, by the Rev. Bradford Paul Raymond, D. D., LL. D.
- June 22, Sunday, 7:30 P. M.—University Sermon, by the Rev. Francis Landey Patton, D. D., LL. D., President of Princeton University.
- June 23, Monday, 11:00 A. M.—Public Awarding of Prizes.
- June 23, Monday, 2:00 P. M.—Class Day Exercises.
- June 23, Monday, 8:00 P. M.—Annual Meeting of Board of Trustees.
- June 23, Monday, 8:00 P. M.—Glee Club Concert.
- June 24, Tuesday, 9:00 A. M.—Meeting of the Φ. B. K. Fraternity.
- June 24, Tuesday, 10:00 A. M.—Business Meeting of the Alumni Association.
- June 24, Tuesday afternoon—Reunion of Classes of 1852, '57, '72, '77, '82, '87, '92, '95, '99.
- June 24, Tuesday afternoon—Receptions by the College Fraternities.
- June 25, Wednesday—COMMENCEMENT.
- June 25, Wednesday afternoon—Commencement Luncheon.
- June 25, Wednesday evening—President's Reception.
- June 26, Thursday, 9:00 A. M.—Examination of candidates for admission begins.
- Sept. 24, Wednesday, 9:00 A. M.—Examination of candidates for admission begins.
- Sept. 25, Thursday, 9:00 A. M.—First Term begins.

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